The National Future Farmer

Owned and Published by the Future Farmers of America

October-November
1959

The average college or university seeks to train young people to THINK.

The *"World's Most Unusual University"* trains them to THINK STRAIGHT.

Most institutions emphasize the value of being GOOD.

The *"World's Most Unusual University"* emphasizes being GOOD FOR SOMETHING.

BOB JONES UNIVERSITY stands for the **"OLD-TIME RELIGION"** and the absolute authority of the Bible.

Various Schools of the University with degrees offered:

The College of Arts and Science—B.A. and B.S.
The School of Religion—B.A., M.A., B.D., and Ph.D.
The School of Fine Arts—B.A., B.S., M.A., and M.F.A.
The School of Education—B.S.
The School of Commerce—B.S.

Institute of Christian Service, Academy, and seventh and eighth grades in connection.

Music, speech, and art without additional cost above regular academic tuition.

BOB JONES UNIVERSITY

GREENVILLE
SOUTH CAROLINA

Farmers you look to as leaders look to Firestone for farm tires

Mr. Charles Moore (left) of Troy, New York, with employee Maurice Matteson—(upper) Mr. Moore's popular Langmore Farms Dairy Bar.

Dairy farming is big business in New York State, and that's easy to understand with farmers like Charles Moore setting production standards there.

Take a look at part of Mr. Moore's 1958 record, for instance. His main program is the operation of his 160-head Guernsey farm and supervision of his spic-and-span dairy bar. His herd has won first prizes as far west as the Utah State Fair. Another entry took a Grand Champion award in Arizona. Then, back home, Mr. Moore's Guernseys won seven Blue Ribbons *plus* the Grand Champion award at the Rensselaer County Fair.

Charles Moore picks the winners in farm tires, too—Firestones! "I buy nothing but Firestones," Mr. Moore declares. "They give me much better all-around service than any other tires I've tried. I like them so much, I don't hesitate to recommend them to other farmers."

Builder of the first practical pneumatic farm tire

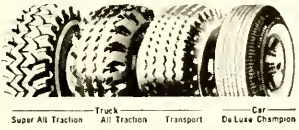
Firestone

BETTER RUBBER FROM START TO FINISH

Copyright 1959, The Firestone Tire & Rubber Company

SAVE AND BE SURE

with Firestone tires on all your wheels!



MAGAZINE STAFF

EDITOR
Wilson W. Carnes

ASSOCIATE EDITORS
Joe Dan Boyd
Howard R. Carter

EDITORIAL ASSISTANTS
Vera M. Soles
Norma Muhlberg

ART EDITOR
John Prezioso

CIRCULATION ASSISTANTS
Norma Salvatore
Marjorie J. Bardall

BUSINESS MANAGER
V. Stanley Allen

ADVERTISING ASSISTANT
Rosalind N. Pazzato

REGIONAL ADVERTISING MANAGERS
John C. Foltz
Charles R. Ocker
Jimmy Willis

●

DIRECTOR OF PUBLIC RELATIONS
John Farrar

●

EXECUTIVE SECRETARY
Wm. Paul Gray

●

NATIONAL OFFICERS

PRESIDENT
Adin Hester, *Oregon*

VICE PRESIDENTS
Bryan Hafen, *Nevada*
Thomas E. Stine, *Missouri*
Lee Todd, *Tennessee*
Richard Van Auken, *New Jersey*

STUDENT SECRETARY
Norman A. Brown, *Michigan*

●

BOARD OF DIRECTORS

CHAIRMAN
W. T. Spanton

MEMBERS
H. F. Duis
H. N. Hunsicker
Walter Jacoby
E. J. Johnson
Byron J. McMahon
R. E. Naugher
G. F. Sullards
Harold B. Taylor

The National
Future Farmer
Owned and Published by the Future Farmers of America

OCTOBER-NOVEMBER, 1959 • Vol. 8, No. 1

EDITORIAL CONTENTS

About the FFA

What American Farmers Do .. 10
National Convention 16
From Foreigner to Future Farmer 25
Three Keys to Success 26
Chapter Greenhouse 28
Why Are We Here? 29
Tips for Trips 30
Leadership Conference 34-35
Behind the Soil and Stones ... 36
Oyster Farming 40
Your National President 57

Features

Boy of My Dreams 20
Farmer in the Space Age 22
Clipping Clues 27
How to Raise Champion Broilers 31
Fishpole Farming 32
Shearing Sheep 38
Looking for Land 44
Safe Driving 60
Tractor of Tomorrow 61

Sports and Fiction

World's Worst Football Game. 46
Archery 52
Trapping 58
Fishing Contest Winners 62
Sportrait 62

Departments

Editors Say 6
Reader Roundup 8
Looking Ahead 12
Free for the Asking 14
Something New 18
Photo Roundup 42
Young Farmers Bookshelf ... 59
The First One Doesn't Have A Chance 66

ADVERTISERS INDEX

Apparel, Hobbies

Wolverine Shoe & Tanning Corp. .....8 & 20
H. D. Lee Company 10
Future Farmers Supply Service 16
Remington Arms Company .. 18
Levi Strauss & Company 54
Peters Cartridge Division 59
Animal Trap Company of America 59
Tandy Leather Company 64
Chapstick 54
American Cheviot Sheep Society 59
Brotherhood Mutual Life Insurance Company 63
Peggy Ann Candy Company .. 64
New American Flag 64
Poppin-Pak Sales Company .. 64
Official FFA Calendar 65

Feeds, Seeds, Fertilizers Chemicals

DeKalb Agricultural Association 6
Ralston Purina Company 7
Eli Lilly & Company 24
McMillen Feed Mills 39
Oyster Shell Products Company 40
MoorMan's 45
Funk Brothers Seed Company 50
Western Condensing Company. 56
General Mills 62

General

Bob Jones University 2
United States Army 11
Proto Tool Company 12
Butler Manufacturing Company 15
Mid-States Steel & Wire Co. .. 22
American Hampshire Sheep Association 22
Sheffield Division-Armco Steel Corporation 23
United States Steel Corporation Agricultural Extension Div. . 37
American Angus Association .. 40
American Hereford Association 51

Tractors, Equipment

New Holland 5
Deere & Company 9
Massey-Ferguson 43
Minneapolis-Moline 55
Buckner Manufacturing Co. .. 56
F. E. Myers & Brother Company 63
Ford Tractor 67
Allis-Chalmers 68

Transportation, Travel

Firestone Tire & Rubber Co. .. 3
Texaco 13
Santa Fe Railroad 14
International Trucks 17
Goodyear Tire & Rubber Co. . 19
A C Spark Plug Division—General Motors Corporation. 21
Perfect Circle Corporation ... 33
Ford Motor Company 41
General Motors Corporation .. 47
Harley-Davidson Motor Co. .. 48
Union Pacific Railroad 49
B. F. Goodrich Tire Company . 53
Fisher Body Division General Motors Corporation 61
Paramount Hotel 64

OUR COVER—Photos by Earl Schweikhard and Paul Gray

Top photo shows Future Farmers assembled for dedication of the new FFA building. Below, President Eisenhower receives an official FFA blanket.

The NATIONAL FUTURE FARMER is published bimonthly by the Future Farmers of America, Inc., at 810 Rhode Island Avenue, N. E., Washington, D. C. Second class postage paid at Washington, D. C.

Single subscription is 50c per year in U. S. and possessions. Foreign subscriptions $1.00 per year. Single copies 10c in U. S.

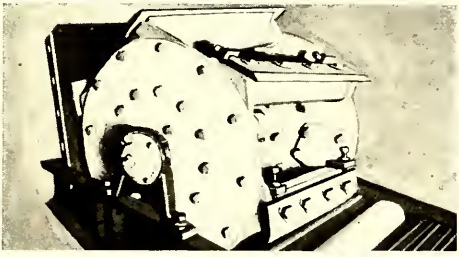
CHANGE OF ADDRESS: Send both old and new addresses to Editorial Offices, THE NATIONAL FUTURE FARMER, Box 29, Alexandria, Virginia.

Cattle really go for the silage you will get when the giant-capacity New Holland "800" Forage Harvester takes command of your chopping jobs.

The mighty "800"...

first choice of farm youths everywhere!

ABOVE is the New Holland "800"—world's fastest forage harvester! Breezes through two corn rows to cut field time 50%. It's easy—with 34-inch spread between points and 6-roller gatherer chains to speed stalks into the huge throat opening. Then it's chopped—fast and clean—up to 45 tons an hour—by the exclusive Micro-Shear* Cutterhead. A special built-in sharpener hones cutting knives to razor-sharpness in 5 minutes *without removal*.



Exclusive MICRO-SHEAR* Cutterhead features straight blades of hardened steel mounted at an angle on a cylinder. Use 2, 3 or 6 blades to vary length of cut.

Copyright, 1959 New Holland Machine Division *Patented

Young farmers and farmers-to-be like the "800's" many work-speeding features: cutting length easily varied from 7/32" to $2\frac{1}{4}$". Adjustable stalk breaker assures butt-end delivery of both tall and short material into throat. Flo-Trac Feed Rolls scientifically control delivery of material to cutterhead to assure faster, uniform cutting. Available with 1- or 2-row corn heads, 6- or 8-foot direct-cut and 6-foot windrow attachments.

See your New Holland dealer for all the details. Or write New Holland Machine Company Division of Sperry Rand Corp., New Holland, Pa.

NH NEW HOLLAND

"First in Grassland Farming"

A New DEKALB Movie
"ACRES OF SCIENCE"

It's a new 25-minute 16mm full color film, with sound track, based on the latest techniques used in CORN RESEARCH. This interesting and educational movie is to be released Oct. 1, 1959 by the DEKALB AGRICULTURAL ASSOCIATION, Inc.

DEKALB'S FINE AGRICULTURAL FILM LIBRARY, WHICH IS YOURS TO DRAW FROM, FREE, FOR YOUR FARM MEETINGS OR CLASS ROOMS, ALSO CONTAINS THE FOLLOWING EDUCATIONAL MATERIAL:

16MM MOVIES...FULL COLOR

1. Acres of Chix
2. Acres of Science
3. Acres of Sorghum
4. Acres of Cages

35MM SLIDE FILMS*

1. Hunger Signs in Corn
2. Corn Color and Color Mixtures
3. Sexual Reproduction in Plants
4. Hidden Values in Hybrid Corn
5. The New Chicken
6. Breeding For Better Chickens
7. The Corn Borer, Gangster of the Corn Fields
8. The Story of a Kernel of DeKalb Corn
9. Sorghum Culture
10. Behind The Seed

EDUCATIONAL BOOKLETS

1. Corn Cultivation
2. How Deep Should Corn Be Planted?
3. How Thick Should I Plant?
4. Don't Judge a Kernel By Its Looks
5. Acres of Gold
6. Hybrid Sorghum
7. The Story of DeKalb Chix
8. There Is Money In Cage Operations
9. The Story of DeKalb
10. Cultural Suggestions for DeKalb Hybrid Sorghum

NOTE: *Other new educational materials are produced from time to time. Write for information concerning these NEW releases.*

*PRINTED SYLLABUS CAN BE PROVIDED ON ALL SLIDE FILMS

This Coupon BRINGS YOU FULL, FREE INFORMATION Mail It Today!

DEKALB AGRICULTURAL ASS'N., INC.
DEKALB, ILLINOIS Dept. NFF-10
Commercial Producers & Distributors of DeKalb Seed Corn, DeKalb Chix and DeKalb Hybrid Sorghum

Please send me information on educational material you have available.

NAME_____
ADDRESS_____
CITY_____ STATE_____
POSITION_____

Remember, they're yours FREE to use FROM DEKALB

Your Editors Say...

FFA news in the Congressional Record. Information about the FFA was placed in the *Congressional Record* twice during the summer at the request of the Honorable Frank Carlson of Kansas. Both times the items were about the National FFA Leadership Training Conference and the dedication of the National FFA Building.

On July 27, the *Record* printed the dedication program, Senator Carlson's dedication address, and pertinent remarks by the Senator about the dedication and the FFA organization.

Then on August 6, two editorials by Jerry Ringo, former FFA national officer, were placed in the *Record.* The editorials first appeared in the *Menifee County Journal,* a weekly newspaper in Frenchburg, Kentucky, which Jerry owns, edits, and publishes. The articles were entitled, "National FFA Leadership Conference Should be Annual Event," and "National FFA Officers Give Quality Talks."

Are you wondering about the future of farming? If you are, the following excerpts from an editorial which first appeared in the *Nebraska Education News* and later in the *American Vocational Journal* should offer some reassurance.

". . . Our present output of trained farmers is far short of present needs and short even of the needs we might reasonably expect with a continued decline in the farm population. Dr. H. H. London, President of the American Vocational Association, recently made the statement, 'Three out of five farm boys will not find an opportunity on the farm, but vo-ag trains only one-half the number needed.'

"If our population on farms drops to a low of five percent by 1980, as some predict, and we have a total population of 250,000,000 we would have 12,500,000 people on farms. Assuming that one in five is a farm operator, as is true today, we would have 2,500,000 farm operators. Taking 40 years as the service span of an operator, then 1/40 of these will have to be replaced each year, creating a demand for 60,000 operators. Since no one has devised a way of identifying people who will go into an occupation, let's assume we will need two seniors graduating for each opening as a farm operator. This would mean 120,000 seniors. At best if one-fifth of the enrollment were seniors, we would need to have 600,000 high school boys enrolled. According to the last U. S. Office of Education figure, we had about 460,000 enrolled. So while the total number of farm operators will be less, we will still need just as many or more young men in training in 1980 as we do today. In addition, these operators will need increasingly competent training for increasingly complex problems of production, marketing, management and farm mechanics."

Putting it another way, the editorial is saying there will be an opportunity for you in farming if you are trained for your occupation. However, should you experience difficulty in getting established as a farmer, don't overlook the opportunities that exist in related agricultural occupations. Some 40 percent of all jobs are being classified as agricultural. And where could you get better training for one of these jobs than in vocational agriculture with a good supervised farming program?

Don't forget Farm-City Week. It is designated each year by presidential proclamation and falls during the week of Thanksgiving. This year the dates are November 20-26. Why not undertake a chapter activity to promote better understanding between farm and city people.

Wilson Carnes
Editor

PURINA VISITS ANOTHER "FARMER OF TOMORROW"

Billy Glenn Turpin is looking to the future while he gains experience and wins Grand Championships with his club projects.

Kentucky boy proves ability to raise cattle

Sometime in the future, it is probable that folks who drive through the rolling hills of Madison County, Kentucky, will admire a herd of white-faced cattle . . . and the cattle will belong to Billy Glenn Turpin.

Billy Glenn already has proved his ability to raise cattle. By the time he had reached the ninth grade in school, he had won three Grand Championships in competition with other young people in the county. In addition he owned two Purina trophies . . . two from a leading farm organization . . . one from a stockyards in Louisville.

Billy Glenn hopes to attend a school that offers a course in agriculture. When his education is completed he will be a farmer.

Purina congratulates Billy Glenn Turpin . . . "Farmer of Tomorrow" . . . trophy winner of today.

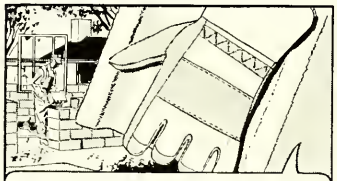
* * * *

The three Grand Champions shown by Billy Glenn Turpin were fitted on Purina. There is a Purina Dealer near you who is ready to help with your feeding and management problems, whether you are feeding for market or the show ring. Let him tell you how to produce meat, milk and eggs at low cost.

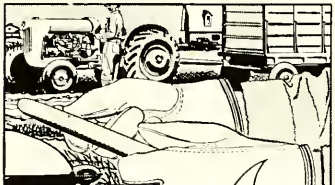
FEED PURINA...YOU CAN DEPEND ON THE CHECKERBOARD

WOLVERINE'S SECRET TRIPLE-TANNING PROCESS TANS NATURALLY TOUGH HORSE-HIDE AND PIGSKIN SUPER SOFT TO STAY SOFT-EVEN DRY SOFT AFTER SOAKING.

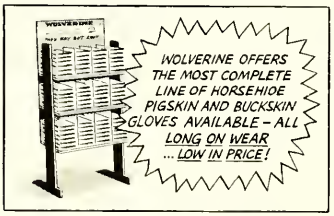
Check these features



RUGGED CONSTRUCTION WORK DEMANDS THIS HEAVYWEIGHT SUEDE PIGSKIN GLOVE. TOUGH LEATHER KNUCKLE STRAP, TIPS, SHIELD, THUMB AND INDEX FINGER MEANS MONEY-SAVING EXTRA WEAR.



ALL-LEATHER DRIVER GLOVES... FARM FAVORITE FOR TWO GENERATIONS. GREAT, TOO, FOR ANY JOB WHERE DRY-SOFT COMFORT AND MONEY-SAVING EXTRA WEAR ARE WANTED.



WOLVERINE OFFERS THE MOST COMPLETE LINE OF HORSEHIDE PIGSKIN AND BUCKSKIN GLOVES AVAILABLE – ALL LONG ON WEAR ... LOW IN PRICE!

ONCE YOU WEAR 'EM, YOU WON'T BE WITHOUT 'EM! AT STORES EVERYWHERE.

WOLVERINE GLOVES

Wolverine Shoe and Tanning Corp., Rockford, Michigan
Canada: Huck Glove Co., Kitchener, Ont.

Nicholson, Pennsylvania

Our son Jerry is in the Army. He is due to go overseas this week and he asked me to notify you we are moving so he will get his copies of *The National FUTURE FARMER*. I send them to him as they come in and he loves them as they are a part of home. He is so proud of his FFA jacket that he asked me to seal it in plastic so it will be fresh when he comes home.

Thanks so much for your help in making a man of my son. What he learned in high school and the FFA has helped him in the Army.

I hope there is a vocational agriculture course in our new school here so my younger sons can benefit by it.

Mrs. Rita M. Hubbs

Moravia, New York

We appreciate very much your permission to reprint the article, "Why Finish High School?" from the February-March, 1959 issue of *The National FUTURE FARMER*.

You can be assured that this material is welcomed by counselors who use it with students attempting to make intelligent career choices.

Corinne Fredenburg
Editor, Chronicle Guidance Publications, Inc.

Barneston, Nebraska

In the October-November, 1958 issue of *The National FUTURE FARMER* there appeared an article with the title "Certified Seed Is Best." When the Magazine reached my hands, I was doing my practice teaching of Vocational Agriculture in Grand Island, Nebraska. Since I was having a series of lessons on certified seed, I found the article a very helpful and efficient teaching aid.

Members of the FFA realize that *The National FUTURE FARMER* magazine is their own. The boys have a great desire to read many of the articles published in it. This article was short and to the point, meaning that a boy had very little reading to do in order to learn better methods. This article also tells both sides of the story so everyone can draw his own conclusions.

Norman L. Husa
Foreign Exchange Student with FFA to Great Britain, 1958

Gainesville, Florida

I read your column "Free for the Asking" in the April-May, 1959 edition of *The National FUTURE FARMER*. The booklets that you are offering contain materials that will be very helpful to me in later years when I am teaching vo-ag boys.

I read my whole Magazine and enjoyed all of the articles, but if I must choose one article that I like best, it is "What Makes a Farmer Tick." This article has special appeal to me because of the experiences that I had in the FFA working my way up through all the chapter degrees and in attaining the State Farmer Degree.

K. Leroy Lee

Switz City, Indiana

I like your fishing contest very much and plan to enter it again if I can catch bigger fish.

I would like you to have it again next year and years to come. It would give fellows like myself a chance to relax.

To improve the contest would be hard to do. You have already done everything. All the rules are good ones. I like the joke book very much. Thank you.

Ron Inman

Arroyo Grande, California

Our boys who receive *The National FUTURE FARMER* are really sold on it and look forward to receiving it. We are still striving for 100 percent subscription in the Chapter and hope that with our Chapter subscription we can encourage the other boys to take it.

Herbert F. Brownlee
Chapter Advisor

Durant, Oklahoma

Now that I have graduated from high school . . . I don't want to be without *The National FUTURE FARMER*. I think it's tops.

I am sending you one dollar. Please add two years to my present subscription.

I am a former member of the Cobb

Unexcelled for Speedy Pick Up...Thrifty Go!

New JOHN DEERE 2-3 PLOW 435 DIESEL

Watch your costs shrink and profits climb, when you pile your row-crop and utility work on this stout-hearted, fast-working money-maker — the *NEW* John Deere 2-3 plow "435" *Diesel*. It's especially designed for new speed and new savings with drawn, power-driven and 3-point tools . . . for use as complete farming power or as an economical second tractor.

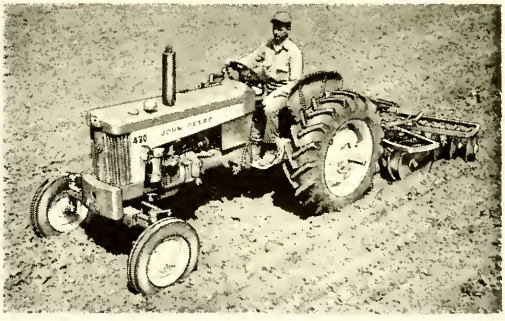
More Power and Speed

The "435" features an ultra-thrifty, electric-starting General Motors 2-cycle Diesel engine that delivers 32 belt horsepower—10 per cent more power than "430" Gasoline Tractors. Special transmission design permits a speed range of 1-7/8 to 13-1/2 miles per hour. In many other respects, the "435" closely resembles the famous "430" Row-Crop Utility.

Many Profitable Features

Regular equipment includes a sturdy 3-point hitch with exclusive Load-and-Depth Control, easy-working Touch-o-matic hydraulic equipment control, a 560 rpm transmission-driven PTO, adjustable front and rear wheels, swinging drawbar and a coil-spring cushioned adjustable seat with back rest. Among items of optional equipment are a "swept back" adjustable front axle which provides exceptional maneuverability, a 560 or 1000 rpm continuous-running PTO (with optional 5-speed transmission), belt pulley, electric lighting, power-adjusted rear wheels, wheel weights, regular or heavy-duty fenders, implement hitch bar and *Float-Ride* Seat.

Profit from the "435" *Diesel's* peak fuel economy, rugged construction, eager power and many modern features. Ask your John Deere dealer today for a demonstration on your farm.



If Gasoline or LP-Gas is your fuel

ask your dealer about the economicol 2-3 plow "430" Series Tractor. The "430" Row-Crop Utility is working here with a KBL Disk Harrow.

JOHN DEERE

"WHEREVER CROPS GROW, THERE'S A GROWING DEMAND FOR JOHN DEERE FARM EQUIPMENT"

SEND FOR FREE LITERATURE

JOHN DEERE • MOLINE, ILLINOIS • DEPT. Q 88

Please send me further information on the ☐ "435" Diesel ☐ "430" Row-Crop Utility ☐ LP-Gas Tractors ☐ Moldboard Plows ☐ KBL Disk Harrow ☐ John Deere Credit Plan.

*Name*_____ ☐ *Student*

*Rural Route*_____ *Box*_____

*Town*_____

*State*_____

RUGGED Lee RIDERS
score in the schoolyard!

Driving in for a lay-up or going up for a rebound, Lee Riders are built for action ...and made to take it! They're shaped better so they fit better. They hug the legs and cling to your back. They look rugged and they are rugged—the toughest denim ever built into "Go" Clothes. No-scratch rivets! Sanforized! Satisfaction guaranteed with these authentic cowboy jeans or your money back, or a new garment free!

Leesures® by Lee

Reader Roundup

FFA Chapter. We all think lots of our Magazine, but we wish you could publish it monthly.

Glendel Rushing

Washington, D. C.

Thanks for the copy of the February-March issue of *The National FUTURE FARMER*, with the article entitled "Why Finish High School?" You did a fine job in telling the whole story in a few words.

Miriam Fuhrman
Advisor in Youth Employment
U. S. Department of Labor

Richland, Michigan

Since I joined the FFA, I haven't missed a copy of *The National FUTURE FARMER* magazine. And now my subscription has run out and I would like to renew it for the coming year.

The Magazine has inspired me and shown me that there is always something to work for.

Glen Collison

Clarksburg, West Virginia

I want to commend you who are responsible for publishing *The National FUTURE FARMER* magazine. The last two issues have been very good in my opinion in that they contain information to publicize the activities of the FFA throughout the country, practical information, and also material to encourage members to reach higher goals in life.

As long as you keep up the present quality of content, the Magazine will grow in subscriptions and will be read by the families who receive it.

W. H. Wayman
Executive Secretary, West Virginia FFA Association

Searcy, Arkansas

Our FFA Chapter takes ten copies of *The National FUTURE FARMER* for library use. The Magazine has been improved very much in recent years. All of my boys particularly liked your February-March issue.

It would seem to me an excellent idea if every vo-ag department would take extra issues and distribute them to barber shops, hospitals, and similar public places. If we can be of any help in promoting our Magazine, please call on us.

Luther Hardin
President, National Vocational Agricultural Teachers' Assn.

WHAT AMERICAN FARMERS DO

THIS YEAR, some 367 American Farmer keys will be awarded in Kansas City. But what will happen to these top FFA award winners after the presentation ceremony? Where do American Farmers go from the National Convention?

Future Farmers of the Vermont Association have provided a partial answer. All past American Farmers were invited to their 1958 state convention. About half of them attended, and practically all answered an accompanying questionnaire concerning present occupations.

Eleven of Vermont's twenty American Farmer degree holders, dating back to 1934, are married; fifteen are farming; one is in a related agricultural occupation; one is in the state University's College of Agriculture; and one is an Air Force colonel. Only two failed to answer the survey.

Leadership hasn't been neglected by these degree winners either. The survey revealed among the group three Grange Masters, three church deacons, two Green Pastures Judges, two ACP Committeemen, four Farm Bureau members, two school trustees, two church treasurers, and twelve community club and lodge officers.

Other members of this select group include a representative in the Vermont Legislature, a Town Auditor, a Town Moderator, and a Town Lister.

One past American Farmer said, "I feel the qualities of good leadership are based upon, among other things, accepting the challenge of our rapidly changing times and meeting the future with confidence."

Another advised all Future Farmers to take part in judging contests, and get all possible leadership training by holding office or serving on committees.

Probably the most typical comment was made by one young farmer who said, "I was proud to become an American Farmer, and think it has given me some measure of confidence in myself—helping me to think I could make a go of it, even through some rough times. I hope I am a good steward of the land."

It's easy to see that an American Farmer Degree means much more than a brief moment on stage to receive a certificate and a golden key. It actually marks the beginning of a career based on "the future of farming." For further proof see the article, "Three Keys to Success," on page 26.

IT HAPPENS BEFORE ENLISTMENT!

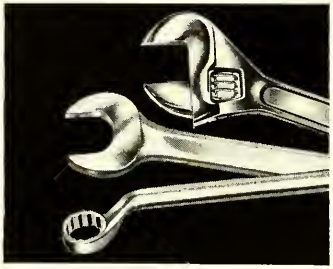
YOU CHOOSE AS A GRADUATE SPECIALIST

Choose your technical schooling before enlistment. Developed by today's Army—a special educational program for high school graduates only! If you pass the qualification tests, you choose your course in the world's finest technical schools. And you have your choice guaranteed before you enlist! **Pick from 107 courses.** Successful candidates for the Graduate Specialist Program can choose from 107 valuable classroom courses. Radar, Electronics, Engineering, Missiles, Automotives, Atomics, Machine Accounting—many more. Here's a chance to get a real headstart in work you like. **Ask your Army recruiter.** He'll gladly explain all the details.

GRADUATE SPECIALIST

US ARMY

GOOD TOOLS keep GOOD EQUIPMENT RUNNING



Keep all of your farm machinery on the job this season with Proto Tools . . . tools you can depend on when you need them most. They'll help keep your tractors, plows, harrows, and other implements ready for hard work.

Including more than 300 different types and sizes of wrenches, Proto manufactures and guarantees more than 2,172 professional tools to do their jobs.

Proto Tools feature clean, functional design; highest standards of forging in special analysis alloy steels, and finishing in rust-resistant, heavy chrome plate.

You buy guaranteed quality from your Proto Dealers, including Implement Dealers, Auto Parts, Builders Supply, and Hardware stores all over the country.

PROTO TOOLS
PROFESSIONAL QUALITY TOOLS
DIVISION OF PENDLETON TOOL INDUSTRIES INC.

2217 Santa Fe Avenue, Los Angeles 54
517 Allen Street, Jamestown, New York
1717 Oxford East, London, Ontario, Canada

Looking Ahead

FARM WORK DAY STILL LONG

Even with modern farm machinery and labor saving devices, farmers still put in long hours. A June 1 USDA report lists the national average work day for farm operators at 10.6 hours, only a few minutes shorter than last year's average. The average for hired workers of 9.3 hours was unchanged from the latest five-year average.

HIGH SPEED PTO FOR FARM TRACTORS

In the market for a new tractor? Some new models are equipped with a 1,000 rpm power take-off. Tractors having this faster pto, which approaches the speed delivered by an electric motor, can be used for such farm jobs as operating air compressors and vacuum pumps. This new feature should help reduce companion machinery costs. With this extra speed, smaller gears and pulley step-ups are needed and shaft sizes can be reduced. In some cases, direct drive is possible, particularly on mowers, grain driers, hay conditioners, combines, forage choppers and electric generators. Older tractors can be equipped with a conversion unit for the higher pto speed.

POISON-FREE SUDAN GRASS IN SIGHT

Researchers working to produce a non-poisonous strain of Sudan grass have found a new method of checking cyanide content in grass seedlings at the University of Wisconsin. Many farmers have lost cattle due to its presence in Sudan grass during certain stages of growth. Yet, Sudan has many qualities which make it a valuable feed, particularly in dry years. It is a fast-growing grass that withstands hot weather better than most others. It is palatable and delivers a high yield of forage per acre. Cyanide-free Sudan strains may be a long way off, say the researchers, but new developments are leading them closer to a "worry free" strain.

GLASS FERTILIZERS PREVENT LEACHING

Fertilizers made from glass are now being used successfuly in Florida, to prevent rapid leaching from the soil, according to H. W. Winsor of the Florida Experiment Station. Six of the minor elements, (boron, copper, iron, manganese, molybdenum, and zinc) can be incorporated into a glass fertilizer, called frit, at the rate of 25 to 50 pounds per acre.

NEW IDEA IN FARM BUILDINGS

A new concept in pole-frame farm buildings is being studied at the Minnesota Experiment Station. The building features a wall built by nailing treated two-inch tongued-and-grooved siding to the poles. It means: (1) less construction time and work since no special members are needed to support the roof, and no nailing girts or other framing are needed; (2) no need for "double construction" near the ground level; and (3) a completely smooth interior. Researchers emphasize the idea as still experimental, but stress possibilities for machine sheds, dairy or beef loafing sheds, hog farrowing houses, and feed storage buildings.

THINGS TO WATCH

Hogs. Look for lower prices through 1960. Secretary Benson urges that hogs be marketed as soon as they reach desirable weight. He points out that if average weight of marketed hogs were reduced six pounds, it would reduce the pork supply by three percent. He says this would help stabilize hog prices and could raise them six to eight percent.

Cattle. It takes an increase of about two million cattle and calves a year to keep up with the increase in human population. This year's increase will be more than twice that amount. If the current increase in cattle numbers continues, economists fear a price break—probably in 1961.

Dairy. Farmers are now receiving higher prices for dairy products than they did last year at this time. Trend should continue through 1959, and long range outlooks indicate even better prices in 1960.

WHEEL-TRACK PLANTER AND WEED KILLER CUTS HIS COSTS

C. F. Boon, of Lowpoint, Illinois, saves time and money with this combination seeder and weed-killer setup. He built a special axle extension to place the tractor's front wheels 120 inches apart. The rear wheels are 40 inches apart. His four-row planter places the seed in the wheel tracks. Only the tracks provide a firm seedbed. This discourages weeds growing between rows. The rows themselves are sprayed with a weedicide carried in tanks on the tractor.

Mr. Boon has cut his field operations to four per crop — plowing, planting and spraying, one cultivation, and harvesting. He plants both corn and soybeans with the equipment.

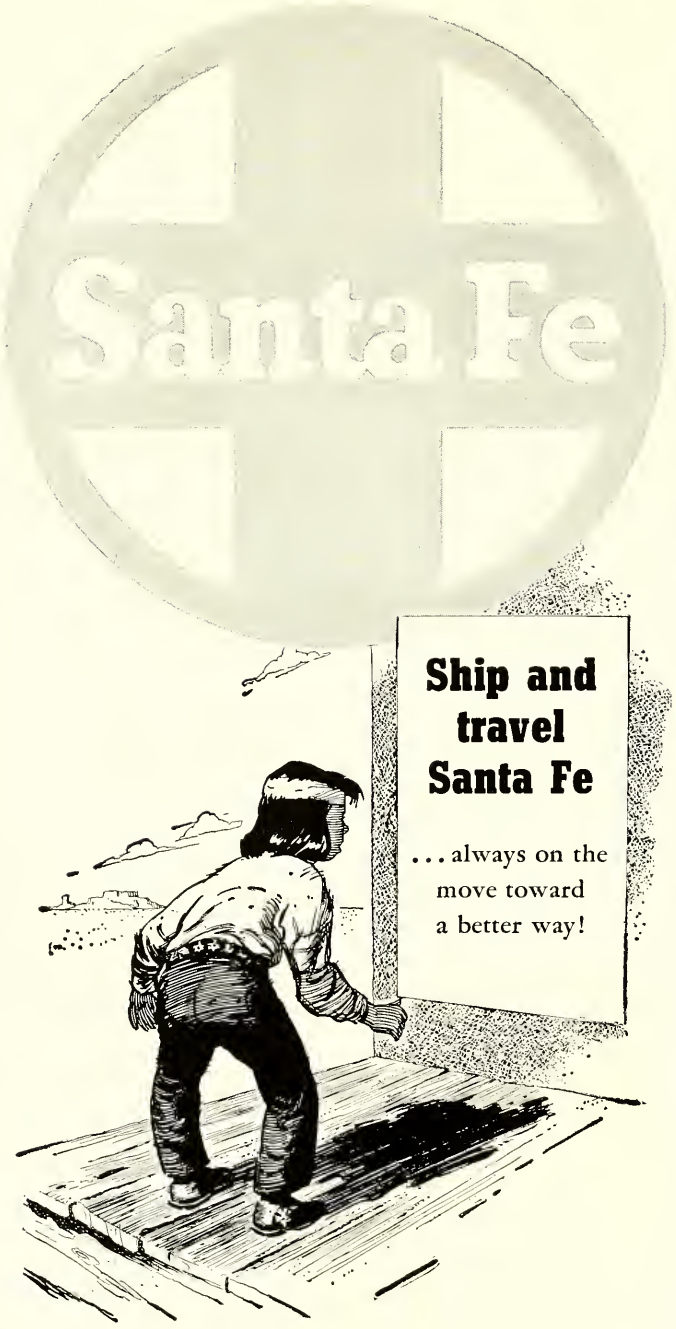
Texaco District Sales Manager B. G. Ansorge (left) is talking to Mr. Boon about Advanced Custom-Made Havoline Motor Oil. Mr. Boon agrees that Havoline is best. Its tough film wear-proofs engines for longer life, and it cleans as it lubricates. Farmers everywhere know that *it pays to farm with Texaco products.*

He relies on Texaco PT Anti-Freeze

Progressive farmers like A. C. Haggard (on tractor) and his son Tony (right) of Phil, Kentucky, want only the best anti-freeze. They have found that Texaco PT Anti-Freeze Safe-T checks the engine's cooling system 8 ways. Against freeze-ups, foam, boil-away and evaporation, rust and corrosion, hose rot and sludge deposits. Mr. Haggard gets top quality Texaco products and neighborly, on-time deliveries from L. T. Wheat, manager of the J. Heber Lewis Oil Co., Campbellsville, Kentucky.

BUY THE BEST...BUY TEXACO

TUNE IN: TEXACO HUNTLEY-BRINKLEY REPORT, MONDAY THRU FRIDAY, NBC-TV.



FREE FOR THE ASKING

These booklets are free. To order, circle booklet numbers in box below, clip and paste on postcard. Mail with your name and address to *The National FUTURE FARMER*, Box 29, Alexandria, Virginia. Please allow sufficient time for your request to be filled.

No. 39.—Here's Safe Driving is an attractive 30-pager written by a three-time winner of the "Indianapolis 500." This potential life saver contains tips on bad weather driving, skids, passing, blowouts, and mechanical condition of your auto. Sure to improve anyone's "auto know-how." (General Motors)

No. 40—Farm Ponds tells why, where, and how to build these convenient and profitable projects. Discusses recreational and business values, with sidelights on seepage, fill material, slope, and spillways. Also offers valuable hints on financing, conservation, and location. (Caterpillar Tractor Company)

No. 41—Outdoor Painting will come in handy as a reference for home beautification projects. It's a detailed volume of decorating information ranging from brush cleaning tips to a list of danger spots where proper painting can save time and money. Discusses preparation for the paint job and paint types available. Includes a helpful chart on color blending. (Nat'l Paint, Varnish, and Lacquer Assn.)

No. 42—Double the Size of Your Farm tells how to accomplish this feat without adding an acre of land. This is a well-illustrated manual which shows how irrigation can sometimes double a farm's yield. Includes pointers on water supply, irrigation costs, and financing problems. Discusses all types of systems and tells what land types are best suited for irrigation. (Worthington Corp.)

No. 43—Growing Walnut For Profit offers ideas for sideline income to Future Farmers. This is not only a fact-filled list of walnut marketing information, but also is a concise volume of management data. Members will be interested in the possibilities of both nuts and timber for market. Also contains a list of agencies selling seedlings. (American Walnut Mfg. Assn.)

No. 44—How To Prepare Your Animals for Show discusses training, blanketing, brushing, and shipping. Is also a handy guide to hoof and horn care, clipping advertising, and show ring procedure. If you follow the show circuit, you'll like it. (R. Laacke Co.)

Clip and Mail

39 40 41 42 43 44

Offer not good after January 20.

Hog comfort and hygiene were prime considerations in selecting these farrowing and nursery buildings at Trimble Manor swine farm near Trimble, Mo.

For the man with a long view on farming...

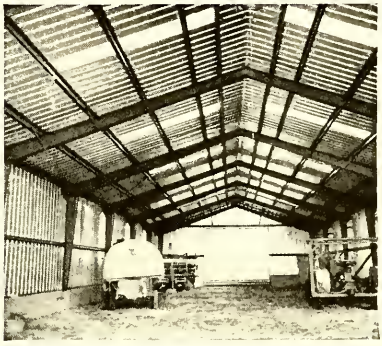
METAL BUILDINGS BY BUTLER

The farm factory is already here for a few farmers . . . and on the horizon for many more. This means automatic materials handling, chore handling and farm processing with power equipment.

These new methods demand new and more functional buildings, built to work hand-in-glove with power equipment. The hard way to get them is to build them stick by stick. The easy way—and the quality way is to order the Butler metal buildings you need, and simply have them assembled according to your plan.

Why Butler buildings? There are many practical reasons. Butler offers a complete range of sizes for all your shelter requirements, from a small pump house up to the largest storage barns. Butler quality construction makes the most of metals. Each part is factory precision-fabricated and sized to fit and function perfectly. Butler buildings are fire and lightning safe; rot, rat and bird-proof.

You utilize all the space you pay for. No posts inside—no matter how big the building. There's room to maneuver—room to lay out interiors any way you choose. Roofs are truss-free. Stack hay or bags right into the roof peak, or suspend bins and install overhead traveling hoists with complete freedom. Big, wide doors clear your biggest machines. Butler buildings are for the man with his feet on the ground, and his eye on the future.



Room to spare and weather-tight protection are both readily apparent in this Butler storage building of the Snarr sheep farm near Idaho Falls.

Your nearby Butler Builder is the man to see for details. Ask him about Butler financing He's listed in the Yellow Pages under "Buildings" or "Steel Buildings." Or write directly to us.

BUTLER®

BUTLER MANUFACTURING COMPANY

7332 East 13th Street, Kansas City 26, Mo.

Manufacturers of Metal Buildings • Equipment for Farming, Oil Transportation, Outdoor Advertising • Contract Manufacturing

Sales offices in Los Angeles and Richmond, Calif. • Houston, Tex. • Birmingham, Ala. • Kansas City, Mo. • Minneapolis, Minn. • Chicago, Ill. • Detroit, Mich. • Cleveland, Ohio Pittsburgh, Pa. • New York City and Syracuse, N.Y. • Boston, Mass. • Washington, D.C. • Burlington, Ontario, Canada

See your
CHAPTER
CATALOGUE

for all Official
FFA
MERCHANDISE

Your advisor has received a copy of the 1959-60 official catalogue.

FUTURE FARMERS
SUPPLY SERVICE
P.O. Box 1180
ALEXANDRIA, VIRGINIA
Owned and operated by the
Future Farmers of America

National Officers and Executive Secretary Paul Gray discuss plans for the 32nd Annual National FFA Convention to be held in Kansas City, Oct. 12-15.

A Busy October for FFA

FIFTY states will be represented at the 1959 National FFA Convention in Kansas City, October 12-15.

Hawaii Future Farmers will seat an official "state" delegate for the first time, although they have been represented as a territory for years. While not yet officially organized as a state FFA association, Alaska will also send a Future Farmer to the Convention.

A slate of outstanding speakers is being prepared by members of the National FFA Office at Washington, D. C. In the past these speakers have been leaders in government, industry, and agriculture.

Still on the drawing board is a special ceremony, honoring the proposed Agricultural Hall of Fame, to be staged by official FFA delegates. Another "first" scheduled for the 32nd national convention is the premier showing of a color film honoring the nation's four Star Farmers.

Visitors from 20 countries will be introduced during the colorful meetings with National FFA President Adin Hester from Aurora, Oregon, presiding. A special interview with six Filipino students, visiting this country under auspices of the International Exchange Program will highlight this part of the convention.

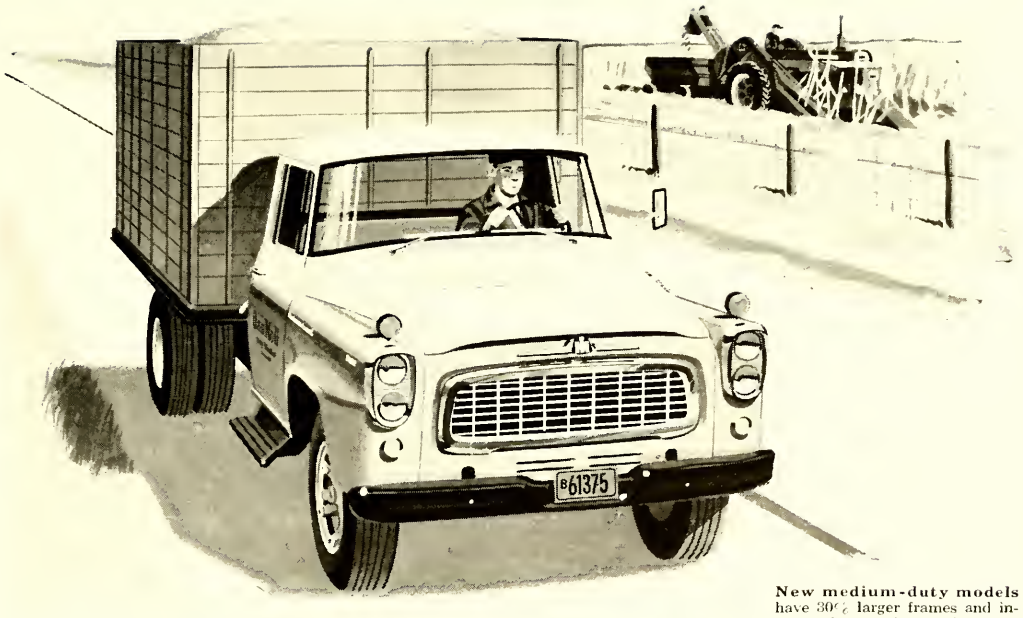
Another feature will present each of the six national student officers for a discussion of selected phases of the FFA program.

Other events of perennial interest include the American Farmer Degree Ceremony, massing of the state flags, Kansas City tours, election of new officers, selection of a new Star Farmer of America, and a variety of entertainment from FFA members.

Prior to the Convention, Future Farmer interest will be focused on Waterloo, Iowa, for the National Dairy Judging Contests. Eligible FFA teams will register for competition October 4. Cattle Judging will be held October 5, after which the nation's Star FFA Dairy Farmer will be presented at the Hippodrome in conjunction with the Dairy Cattle Congress. Final event will be the Dairy Products judging scheduled for October 6.

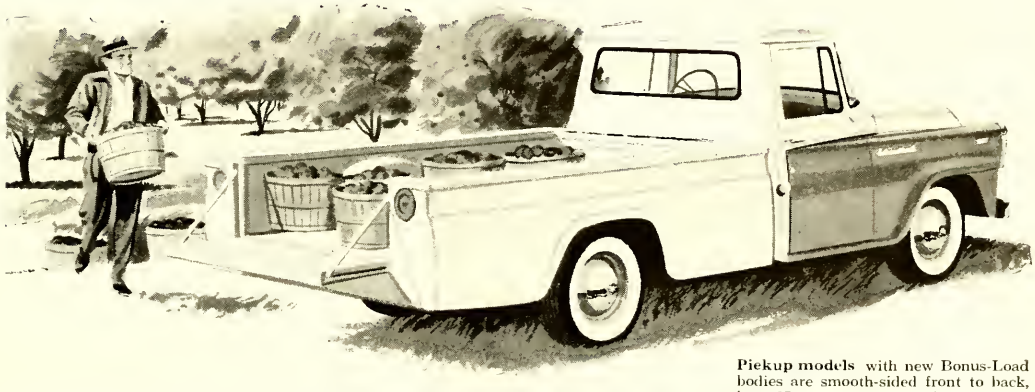
Top FFA Dairy Judging teams compete in National Contests at Waterloo, Iowa

Dates for FFA events at National Dairy Cattle Congress are set for Oct. 4-6.



New medium-duty models have 30% larger frames and increased capacity springs for greater stability and longer life. New truck-designed V-8's or "sixes" give economy under load.

Harvest time...or any time



Pickup models with new Bonus-Load bodies are smooth-sided front to back, have 25% more cargo area in grain-tight boxes. Work *everywhere* with sure four-wheel-drive! V-8 or six-cylinder power.

these trucks can take it!

Pile on top payloads day after day – these INTERNATIONAL Trucks are "farm tough" in every way. In huskier frames, in stronger springs. And in *power*—with a choice of new INTERNATIONAL truck-designed V-8 engines in 266, 304 and 345 cu. in. displacement, or famous economy "sixes."

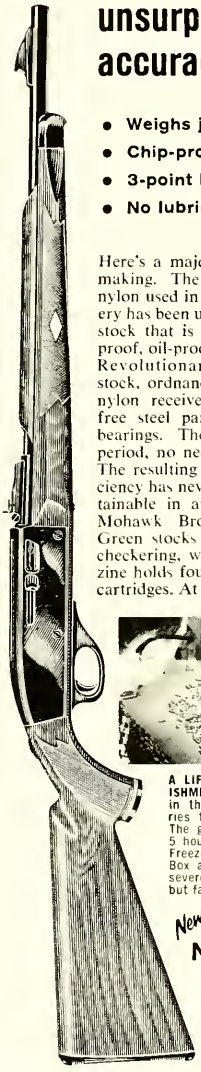
Sounds good? They look good and ride smooth, too. See your INTERNATIONAL Dealer for more information.

International Harvester Co., Chicago
Motor Trucks • Crawler Tractors
Construction Equipment • McCormick®
Farm Equipment and Farmall® Tractors

INTERNATIONAL® TRUCKS

WORLD'S MOST COMPLETE LINE

Amazing structural-nylon and ordnance steel design gives new 22 autoloader unsurpassed accuracy



- Weighs just 4 pounds
- Chip-proof, warp-proof
- 3-point bedding
- No lubrication

Here's a major advance in rifle making. The same structural-nylon used in industrial machinery has been used to create a gun stock that is chip-proof, water-proof, oil-proof and warp-proof. Revolutionary integration of stock, ordnance steel barrel and nylon receiver means friction-free steel parts ride on nylon bearings. There's no break-in period, no need for lubrication. The resulting accuracy and efficiency has never before been obtainable in an autoloading 22. Mohawk Brown and Seneca Green stocks have clean, sharp checkering, white inlays. Magazine holds fourteen 22 long rifle cartridges. At your dealer's now.

A LIFETIME OF RIFLE PUNISHMENT was concentrated in the Remington laboratories to test the Nylon 66. The gun was rapid-fired for 5 hours without a jam. The Freeze Box, Heat Box, Rain Box and Dust Box produced severe weather conditions, but failed to clog the action.

New

NYLON 66

$49.95*

*Price subject to change without notice.

Remington

DU PONT

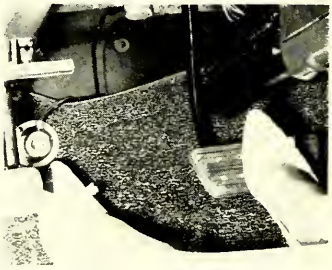
Remington Arms Company, Inc., Bridgeport 2, Conn. In Canada: Remington Arms of Canada Limited, 36 Queen Elizabeth Blvd., Toronto, Ont.

something new

Plierench is a pocket tool with geared transmission. Is said to replace lug, ratchet, pliers, and screwdriver. Has many uses. Details from Plierench Inc. 4611 N. Ravenswood, Chicago 11, Ill.

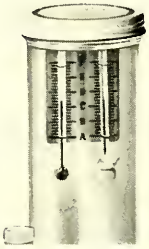
Sabetha Industries offers this safety flag light to operate on a six or 12 volt battery. Uses red, amber, or blue lenses and carried in cannister when not in use. Write to Sabetha, Kansas.

Two-way radio designed for farm use may be wall-mounted or mobile. Can use any number of units at once and requires no special permit. Radson Corp., 911 E. Empire, Bloomington, Ill.



Glide Control is an electronic device which attaches to your carburetor and permits a pre-determined auto speed without accelerator pedal use. Write to 8720 Sunset Blvd., Los Angeles 46.

Just lace these boots once! From then on, you zip them on and off. Patterned after new Air Force design. Chippewa Boots, 2855 Park Ave., Minneapolis 7.



New grain testing kit quickly tells if grain, corn, beans, or hay is safe for storage. Details from Rossi and Co., 607 Shelby, Detroit 26, Michigan.

GOODYEAR TIRES

"They treat you fine at the Goodyear Sign!"

Is your tractor losing torque because of its tires?

TRACTION SURE-GRIP HAS "TORQUE CONTROL"

Torque has been boosted in the higher-powered tractors built during the past ten years. As much as 30% more drawbar pull is at your service.

But only a tire DESIGNED to harness it can make that torque pay off in extra travel per hour, in fuel savings per acre worked.

TRACTION SURE-GRIP is that tire! A look at the tread and shoulders will show you why.

Those extra-deep, ruler-straight lugs with "Wedge-In" action get a solid vise-like grip on the soil. The lugs extend the full width of the tire—and down to the sidewalls for extra traction. Wheel-spin—even in a muddy field—is cut way down.

And bruises, buckle breaks, cracks and rim slippage have met their master, too. Goodyear 3-T Cord – triple-toughened by an exclusive process involving Tension, Temperature and Time—fights these troubles to a virtual standstill.

Here's the tractor tire that pays back its cost faster—and keeps on saving you money. See it on the new, more powerful tractors – or call your Goodyear dealer. Goodyear, Farm Tire Dept., Akron 16, Ohio.

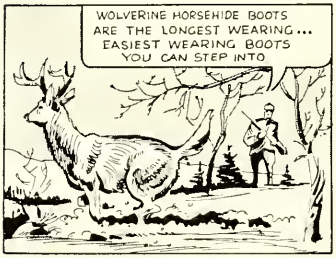
FARM TIRES BY

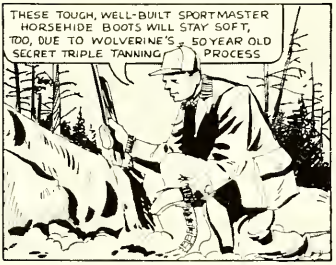
Sure-Grip—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

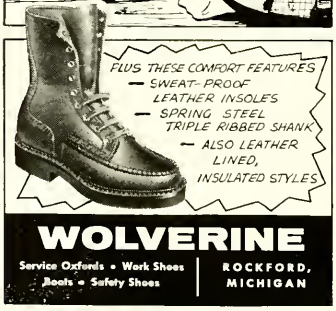
GOODYEAR

MORE FARMERS PREFER GOODYEAR TRACTOR TIRES THAN ANY OTHER KIND!

Comforting Facts about
WOLVERINE SPORT BOOTS




THESE TOUGH, WELL-BUILT SPORTMASTER HORSEHIDE BOOTS WILL STAY SOFT, TOO, DUE TO WOLVERINE'S 50 YEAR OLD SECRET TRIPLE TANNING PROCESS


PLUS THESE COMFORT FEATURES
— SWEAT-PROOF LEATHER INSOLES
— SPRING STEEL TRIPLE RIBBED SHANK
— ALSO LEATHER LINED, INSULATED STYLES
WOLVERINE
Service Oxfords • Work Shoes
Boots • Safety Shoes
ROCKFORD, MICHIGAN

Connie Barnett

Are You The Boy of My Dreams

By Connie Barnett
Louisiana FHA President

THE BOY of my dreams is clean cut and neat. Too many boys have the mistaken idea that only "hoods" or "beatniks" rate a second look from the feminine sex.

It just isn't true. Girls aren't impressed by turned up collars, slicked back hair, black leather jackets, and tight blue jeans. In fact, that type often disgusts a girl. It pays to look nice and always wear appropriate clothing. *(The National FUTURE FARMER*, October-November, 1958.) And it isn't hard to do. Just use common sense, and avoid such extremes as wearing a tux to a barbecue or blue jeans to a formal dance.

Manners are another indication of a boy's character. My dream boy is considerate and thoughtful at all times. If you would always be at your best, try these tips on your dating "P's & Q's":

1. **Show interest in your date.**
2. **Always open doors for her.**
3. **Help her be seated.**
4. **Avoid off-color jokes.**
5. **Don't be late.**
6. **Stand for ladies and elders.**
7. **Don't flirt with other girls.**
8. **Don't call her with a car horn.**

The boy of my dreams is intelligent. I don't mean he is a "brain" or a "bookworm," but he should be able to hold his own with an average group. Further, he is dependable—a man of his word. When he makes a promise, he keeps it.

Cultivate these three traits if you would like to create a lasting impression with that very special "Miss Someone"—understanding, patience, and forgiveness. They are very important to any girl.

Personally, I also look for a well-rounded personality in a good date. Actually, it's possible to have a certain amount of all the traits I've mentioned without being well rounded. A sense of humor, tact, and friendliness are mighty important in developing a winning personality. And in the FFA, you have a wonderful opportunity to broaden yourself by trips to other cities for a judging contest or a convention. Thereby you meet new people and see new places. Make the most of such trips while you can.

The boy of my dreams is sincere. The dictionary says this means "without deceit, pretense or hypocrisy; truthful, faithful, straightforward; honest." It's a pretty large definition to live up to. But if you always do the right thing in all situations, you can't go wrong.

He is also ambitious. Most people can go to college and get a degree, but without that extra "drive" called ambition, no one can be a true success. An ambitious person will provide well for a family and always be dependable. So, be ambitious if nothing else!

He is a good sport. This can mean two things—a good sport in athletic activities or a good sport in social activities. As you grow up, many social "calamities" may come your way. But if you're a good sport it shouldn't be hard to shake off many of them. The important thing is to realize the difference between real disasters and minor ones.

He is considerate. The boy of my dreams certainly doesn't get in a rut, so to speak. Have you heard of boys who pick up their dates, go to movies, a drive-in, the local teenage hangout, and then home—time after time? It's much more fun to try new things now and then. You'll both be glad you did.

I realize these are pretty high standards. It would be hard for one person to measure up to all of them. But the biggest room in the world is the room for improvement, so TRY to reach these goals and you'll be the boy of MY dreams.

ON THE FARM . . . AND ON THE HIGHWAY . . .
CULMINATION OF 51 YEARS OF RESEARCH—BROUGHT TO YOU BY AC

NEW AC FIRE-RING SPARK PLUGS

In the past half century AC has pioneered one great spark plug advance after another. The new AC FIRE-RING SPARK PLUG is the culmination of all the advances which have made AC the world's most imitated spark plug.

If you could see inside a combustion chamber when an AC FIRE-RING Spark Plug fires, you would see an instantaneous clean, full burning of the fuel-air mixture. It looks like an explosion. But it really isn't—it's a spreading ring of fire. If you could see it in slow motion you would see that the AC FIRE-RING Spark Plug, properly placed in the chamber, *lights* the *fire* and the flame spreads out rapidly to *ring* the combustion chamber. Engineers call this a "flame front," but AC thinks FIRE-RING is more descriptive. This hot, hot fire-ring heats the compressed gases—pressing the piston down in the cylinder. You get full, firm power from each cylinder.

Be sure you ask for new AC FIRE-RING Spark Plugs when you replace—as you should every 10,000 miles for cars and trucks . . . every 250 hours for average tractor use. It's the modern way of firing engines cleanly, quietly, powerfully. Remember—you get the finest first from AC!

AC PRESENTS THE ART CARNEY SHOW, NBC-TV, NOVEMBER 13

AC SPARK PLUG — THE ELECTRONICS DIVISION OF GENERAL MOTORS

Mighty MacWire says:

Learn to buy farm fence with care ... as a long-term investment rather than a necessary expense. Learn about Mid-States ... the Farm Fence that gives years of extra service at no extra cost. Investigate Mid-States Steel Posts, Barbed Wire and other farm products, too.

Look for this emblem; mark of top quality

MID-STATES fence

MID-STATES STEEL & WIRE COMPANY
CRAWFORDSVILLE, INDIANA
JACKSONVILLE, FLORIDA

We SURE Are in Demand!

We finish quicker at handier weights.

We have more uniformity—less "tail-enders."

We produce a carcass desired by packer and consumer.

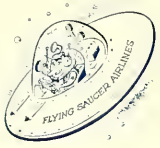
We also shear good wool.

We like to show.

Include us in your Farming Program

Write

American Hampshire Sheep Association
STUART, IOWA
"The World's Most Useful Sheep"



The Farmer's Challenge

Agriculture in the Space Age

By Dr. Roger Corbett, President
New Mexico State University

TRY to look 15 years ahead! Push aside the clouds and vapor in your crystal ball. In 1974 will there be anything wrong with the nation's food supply? Will the lack of people trained in agriculture become so serious that the whole economy will suffer?

Within a generation the farm population has been reduced from 35 percent of the total population to 10 percent. How far will this reduction go? Some say it will level out at about eight percent, others predict five percent and a few actually believe that two percent can feed and clothe the other 98.

Is it possible that our whole economy is like a spinning top? The point on which the top spins is the eight or five or two percent of the people which produce the food and fiber. When anything happens to the supply of food and fiber, the spinning of the top is greatly affected. If the point is "dull" because the people are not trained, maybe the top will begin to wobble. Yes, this point could be so rough because of lack of trained people that the whole economy would be seriously hurt.

A few years ago young men were told not to take engineering. The common saying was that engineers are "a dime a dozen—there is no future in engineering." We are now reaping a whirlwind from this mistaken point of view. Some say men trained in engineering are now the scarcest and most demanded in our economy today. Ask today's young men if they plan to study agriculture in college. Altogether too many are answering: "No, because there is no future." Most people do not know that in 1958 less than one-half as many trained men were graduated in agriculture as were needed. This trend is accelerating. Let this pace continue at a faster and faster rate for the next 10 years, and what kind of whirlwind will we reap nationally?

Let us take a look at what has happened to our farms. In recent years farms have become larger and larger. That is probably good from the economic point of view, because the alternative seems to be a peasantry such as in France where farms became smaller and smaller until they will not support a family. The trend in the United States has resulted from mechanization, scientific knowledge, and other factors which allow men on farms to produce much more per hour of labor than was possible only a few years ago.

We now need on our farms trained engineers to handle the large tractors and harvesters, in fact, every type of machinery. Farmers also need a good working knowledge of many fields of science—chemistry, pathology, genetics, and business management. The need for trained people is greater today on farms than it ever has been, *in spite of the fact that our farm population has been dwindling relative to the rest of the working population.*

Along with this has come a need for training in areas which service farms. Chemistry, for example, must produce men that know how to fight insects and diseases. They must also know how to fertilize and conserve the soil. Genetics is constantly in use in plant breeding, animal breeding and selection.

The agricultural revolution has been going on during the past 50 or 75 years. It has paralleled the industrial revolution in its effectiveness. Nowhere else in the world is food production such an efficient process.

More and more city people are eating better and better for a smaller proportion of their spendable dollars in the United States than anywhere else in the world. Fewer and fewer farmers are supplying this abundance, making more of America's manpower available to produce and distribute the nonfood and fiber items such as automobiles, television sets, houses, tractors, movies, books and a thousand other items.

Farm and city people need to get together and learn more about each other. They need to glean facts instead of rumors—friendships instead of misunderstandings. All of this comes about to the benefit of both groups. We stand challenged in the name of progress to cultivate this sort of understanding.

Future Farmers of America can help to meet our nation's needs by continuing to take seriously their high school training in agriculture.

You'll be money ahead when you buy Barbed Wire WITH YOUR EYES WIDE OPEN

Buying barbed wire is a transaction you should enter into **with your eyes wide open.** At first glance barbed wire of uncertain origin and quality (that varies from too soft to too brittle) may look like a good buy.

But take a second look! As reported in a leading farm publication: "Where samples of foreign wire are analyzed and tested, it frequently falls far below American standards of length, gauge, quality of steel, galvanizing and workmanship."

That's why it pays to buy Sheffield "100" High Strength Barbed Wire. Look what you get:

1. Sheffield "100" Barbed Wire tests up to 20% stronger than ordinary barbed wire. Yet it's pliable and easy to handle.
2. Has a tightly bonded coating that fights corrosion to give you extra years of service life.
3. Has evenly spaced 2- or 4- point barbs with never a skip.

So for the finest in fence at lowest cost per year, stop in at your Sheffield dealer's and see the quality in Sheffield's "100" High Strength barbed wire.

Remember, its quality is assured by steelmakers who have *stood behind their fence products for more than 30 years. Steelmakers who are neighbors of yours* who cannot afford to supply you with anything but the best.

See Your Sheffield Dealer For All These Quality Steel Products

Woven Wire Field and Poultry Fence • Barbed Wire • Smooth Wire • Ornamental Fence • Steel Gates • Coiled Baling Wire • Bale Ties

Nails and Staples Regular, Screw Type and Ring Shank Brads, Small Nails, Tacks and Spikes

Bolt and Nut Products

Keep America Strong

BUY U.S.A.

SHEFFIELD DIVISION

ARMCO STEEL CORPORATION

OTHER DIVISIONS AND SUBSIDIARIES: Armco Division • The National Supply Company • Armco Drainage & Metal Products, Inc. • The Armco International Corporation • Union Wire Rope Corporation • Southwest Steel Products

Lilly VISITS THE FARR FARMS COMPANY
GREELEY, COLORADO

"We've fed 80,000 steers and heifers full time on Stilbosol"

by Eugene S. Hahnel

"Our records prove it pays to feed Stilbosol every day to every head," reports manager-nutritionist. Detailed records back his story.

The famous Farr feedlots can fatten 10,000 cattle at one time. The day we visited with Dean Selleck, their livestock supervisor and nutritionist, 70% of the cattle on hand were market heifers.

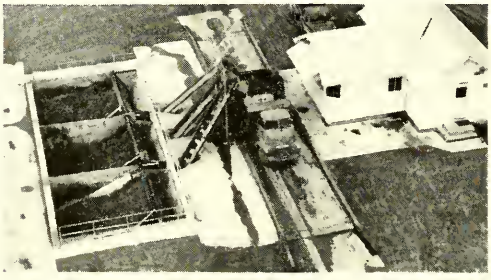
"Stilbosol gives us excellent gains on heifers, too," Dean told us. "In fact, all of our cattle get Stilbosol rations every day they're here up to 48 hours before slaughter. Since we first experimented with Stilbosol in 1955, we've fed it to more than 80,000 head. About half of those were heifers. Our records show the extra gains and greater feed efficiency . . . and Stilbosol has cut our cost of gain 12 to 15%."

When Dean speaks of records, he really means it. Three long pages of abstracts are kept on each lot. These records include every conceivable fact on the cattle from the time they're bought until they hit the market.

Before using Stilbosol, the Farr lots averaged 2 pounds daily gain on steers fed 120 to 140 days, and about 1.85 pounds on heifers. Now, with Stilbosol, they boost daily gains up to 2.5 pounds on steers, 2.25 pounds on heifers. "Those figures are conservative," Dean told us; ". . . that includes all the shrinks right up to the packing house scales.

"With all this evidence in Stilbosol's favor, it looks like a fellow would have to be pretty backward not to feed it to *all* his market cattle *all* the time," Dean concluded. "You just can't overlook those extra gains and lower costs."

This silage loading pit is part of the full mechanization used to feed Stilbosol rations twice a day. The Farr trench silo is 650 ft. long, 40 ft. wide, 17 ft. deep, and holds 10,000 tons.



Three men move about 120 to 130 tons of feed daily in two 2½- to 3-hour feeding periods. Only nine men are needed to handle the entire efficient Farr feedlot operation.

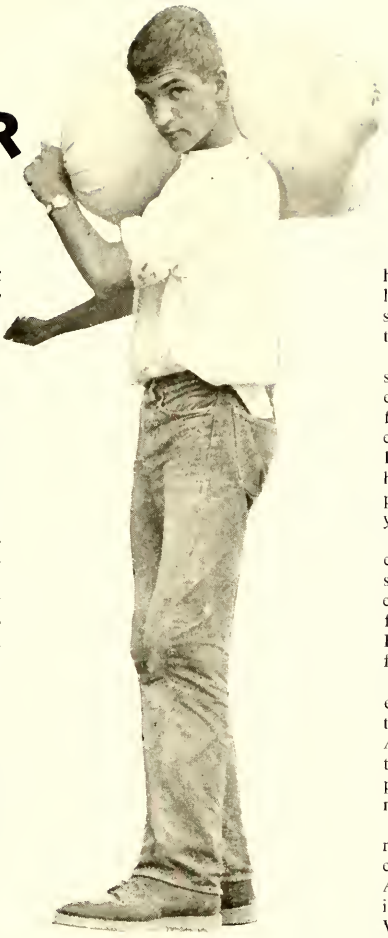
Stilbosol®
(diethylstilbestrol premix, Lilly)

Lilly

Stilbosol is Eli Lilly and Company's trademark for diethylstilbestrol premix which is manufactured and sold under exclusive license granted by Iowa State College Research Foundation, Inc., under its U.S. Patent No. 2751303.

ELI LILLY AND COMPANY • AGRICULTURAL AND INDUSTRIAL PRODUCTS DIVISION • INDIANAPOLIS 6, INDIANA

From FOREIGNER To FUTURE FARMER



AN UNSURE but unafraid young German farm boy stepped onto American soil from an ocean liner's gangplank on April 11, 1952. He was 12 years old and couldn't speak a word of English.

Deerfield, Wisconsin, FFA member Willy Quast was born in Rumania and lived with his parents on a 120-acre farm during early childhood. In 1941, the invading Russian army declared martial law and ordered all civilians to leave the country. The Quasts headed for Germany, where they promptly received a six-month sentence to a concentration camp.

Upon their release, the Quast family got a break. The Germans sent them to Poland, bequesting an 80-acre farm tract to their care. "Just a way of compensating for our troubles I guess," explains 19-year-old Willy today.

But that didn't last long. By February, 1944, it was apparent that Germany was losing the war. Once again Russian armies threatened the Quast homestead. Fleeing to Hamburg, Germany, the four Quasts worked for eight years as farm laborers until an American "sponsor" offered to bring them to the United States.

"The sponsor happened to be a doctor from Lodi, Wisconsin," Willy relates. "He helped my father get a job, and pretty soon we felt at home with our American neighbors in the beautiful dairy state."

Willy had little trouble with the English language, reputedly one of the toughest to master. By 1955, when he enrolled in vocational agriculture at Deerfield High School, the young immigrant was able to recite the FFA Creed without the slightest trace of an accent.

Willy has mastered both the English language and American farming skills.

"It was hard to qualify for vocational agriculture," Willy recalls, "Since we didn't own a farm, I had to meet the requirements primarily as a hired hand."

But Willy did have a small Green Hand project—two acres of corn. During his sophomore year, he was manager of his employer's turkey flock. Later Willy's farm skills expanded from cropping and dairying to such related chores as dehorning, fruit tree pruning, and tractor driving.

Part of Willy's vo-ag and FFA training came at Middleton, Wisconsin, where R. W. Davis recognized the youngster's firm determination and special talents.

Amazed at Willy's ability to handle the English language as well as any native, Davis encouraged him to consider FFA public speaking competition. Eager for a chance to better himself, young Quast quickly agreed to represent the chapter in this event. Recalling his past efforts in learning the English language and four years of general speech study, Willy decided this contest was a natural for him.

And it was! Last June, Willy Quast stood before the delegate body at Wisconsin's state FFA Convention as a finalist in their state public speaking contest. In the audience, State FFA President Roger Christy murmured, "It's hard to believe that Quast was a complete stranger to our language seven years ago."

Although Willy did not win the state crown, his mastery of such a technical subject as "Contract Farming and Vertical Integration" drew considerable praise from several corners of the auditorium. His answers to judges' questions were frank, clear, and informative.

Willy's opportunities, hard work, and eventual success in this phase of FFA training has helped him pick a career. A 1959 high school graduate, he plans to enter the University of Wisconsin to pursue an education in speech and communications.

But he has two goals which must be realized before starting his college education. He first wants to become an American citizen and serve his hitch in the armed forces. At presstime, Willy lacked only a few technicalities in his naturalization process. And he was scanning advantages of various service branches while working full time on Adolph Osterlie's Holstein farm near Deerfield.

"The U. S. A. and the FFA have been mighty good to me," Willy proudly admits, "I hope I am properly grateful. In Germany I could have studied a European version of high school ag training called, 'landwirtschaft'. But only in America could I have found the unlimited opportunities which came to me in the Future Farmers of America organization."

Willy and the Osterlie's stock dog handle most of the milking chores.

THREE KEYS TO SUCCESS

Three gold American Farmer keys are behind the success of this brother-trio's $80,000 Duroc and Holstein farm.

Former Regional Star Farmer and State FFA President Marvin Krull is titular head of the 450-acre farm. Twin brothers are partners.

Each partner in this $80,000 farm enterprise holds an American Farmer Degree.

By Joe Dan Boyd
Associate Editor

WITH THREE American Farmers working full time, there's little need for hired help on the Krull dairy farm at Lake Mills, Wisconsin.

Headed by 31-year-old Marvin Krull, former Central Regional Star Farmer, this terrific trio milks 34 head of registered Holsteins and manages 450 acres of rich cropland. Last year's herd average was 15,081 pounds of milk and 533 pounds of butterfat.

Dean and Dale Krull, 28-year-old twin brothers, are partners in the $80,000 operation, but have appointed Marvin as official farm manager.

About 35 percent of the Krull's income is derived from a flock of top-grade Duroc swine. They currently run some 100 head of these bronze meat-makers and boast the oldest consecutive show record at the Wisconsin State Fair.

Marvin's leadership and managerial ability come quite naturally. He was 1947 Wisconsin FFA president, and is currently a leader in various local farm organizations. But the real secret of the Krull farm's success is complete family cooperation and the sharing of a common goal—Wisconsin's most efficient dairy and swine operation. Already well on the road to realization of these aims, the Krulls hold an eight-year-award in the Progressive Breeder's Registry given by the Holstein Association.

Lake Mills FFA Advisor Arthur Mayo helps Marvin determine replanting needs in new Krull forestry project.

"One of our cardinal management rules is to avoid buying anything we can produce ourselves," Marvin says. "Last year we didn't lay out a penny for commercial feed in either operation."

The Krulls turned this trick by putting up 300 tons of corn silage from a 165-acre corn patch, while growing 35 acres of alfalfa and brome grass. All other available land went into oats, hay, or cash crops. Twenty acres were used to produce oat seed and 35 acres went into sweet corn production.

"We mix our own feed, too," Marvin explains, "and like to use this dairy ration: 1200 pounds of oats, 400 pounds of oil meal, 200 pounds of bran, 100 pounds of brewer's grain, 20 pounds of bone meal, and 10 pounds of trace salt."

The Krulls believe the days of 400-pound producers are numbered. They are currently shooting for a 600-pound average, and will come close this year. Marvin says the key to efficient dairying is good hay. He believes it will cut protein costs by one-third and will also help to reduce certain disease dangers.

"Forty percent of good dairying is in your feeding ability," he maintains. "Another forty depends on your breeding program and the last 20 percent is in general farm management principles."

The Krulls live up to this formula by practicing good milking procedure at all times. They haven't had any mastitis losses in six years. Antibiotic tubes are always kept ready for immediate use. A few minutes each day are devoted to "trouble shooting"—looking for disease danger signs. Hay is treated like the gold dust it represents to the three Krulls. It never stays in the field more than 24 hours after cutting. A hay conditioner has been used ever since they were available to the public, and all haying work its completed by June 15th.

Hired help is almost non-existent.

Only in rare situations or on special projects do they use it. About six weeks of extra man hours per year is the maximum.

With 55 percent of their income stemming directly from the dairy, it naturally takes up much of their time. But the Krulls also put plenty of work into their Duroc operation. Current ration includes 1200 pounds of corn, 800 pounds of oats, and 400 pounds of concentrates. They sell mostly breeding stock and follow only selected parts of the show circuit. In 1955, a Krull Duroc boar was named grand champion at the National Swine Show in Austin, Minnesota. It sold for $1700.

"I figure 10 percent of our profits comes from our small laying house, cash crops, and orchard," Marvin opines, "not that we divide our time in that exact ratio. We try to handle every job as soon as possible. You can't afford to neglect any part of a farm operation."

Now married and the father of an 11-month-old daughter, Marvin says vo-ag first helped him to develop the right idea about farming. He feels you must regard it as a true *business* and be well-grounded in the fundamentals of agriculture. He started with a Green Hand project program of four gilts and four heifers. At high school graduation time, his record books listed some 44 Holsteins and a running start for the Star Farmer title.

Today, the three Krull brothers—Marvin, Dale, and Dean — quickly encourage any potential farmer to enroll in vocational agriculture as a training medium. With three gold keys to back it up, they offer this bit of advice:

"Fertilizer is your farm's best investment. Next in importance is machinery and well-managed legume pasture in livestock operations. But never forget the primary rule—love your work."

Dale Krull proudly points out some of the Durocs which have helped them set the oldest show record at state fair.

Clipping Clues

IF YOU THINK a haircut improves your appearance, take a look at the "before and after" shot in this title.

Clipping is an important part of any showman's grooming program. This art is essential for all who show naturally polled and dehorned steers or Aberdeen Angus heifers. Polled Hereford's polls are sometimes clipped.

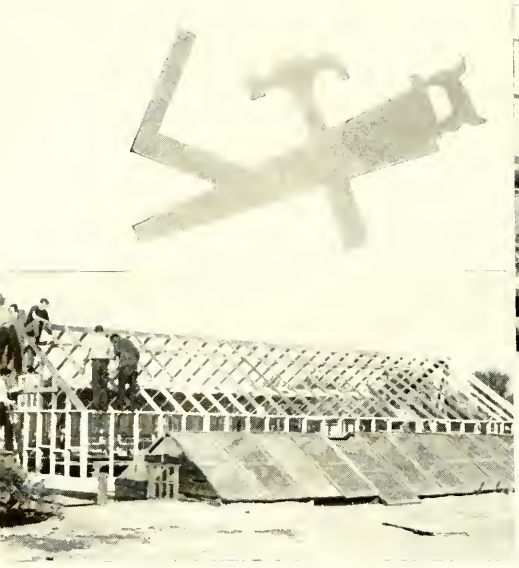
Tails of practically all show animals should be clipped from above the switch to the tailhead about three weeks before each show. This prevents stubby looking hair and rounds out any animal's appearance.

If you don't own a clipper, perhaps there's one in your chapter's mobile show box. Many Future Farmers have pooled their finances or appropriated chapter funds for this purpose. It's a worthwhile investment, capable of helping your animal catch the judge's eye more often.

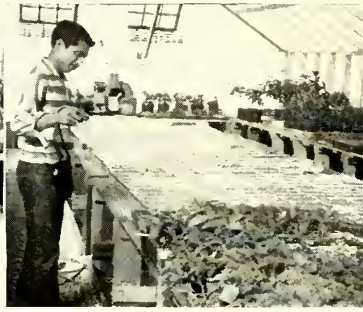
Here's a tip to simplify tail clipping problems. Brush hair up and out on the rear quarters before starting.

Avoid clipping too far back on the neck. First clip head, then reverse clippers to feather hair into neck.

The photo below shows where to begin clipping tail. Don't clip tailhead top too close. Let it feather out.



Below, Frank Villa takes a turn at watering seedlings in spacious new greenhouse.



Above, Future Farmer Dick Tilley obtains practical tomato culture experience.

New greenhouse dwarfs old structure in foreground. Project was completed by four vo-ag shop classes.

YOU CAN BUILD A Chapter Greenhouse

By Will Penna

DIVIDENDS are pouring from a greenhouse project started last year by the Hemet, California, Future Farmers.

The sixty budget-minded students decided to build their own greenhouse when they found it would cost $5,000 or more to contract the job. Advisor James Taylor encouraged them, pointing out a chance to:

Obtain shop experience.
Learn horticulture.
Increase chapter funds.

Hemet FFA members regarded this major undertaking as just another cooperative project. "I guess we learned a lot of lessons that some guys would only call *problems*," recalls chapter member Steve Dollar.

After shopping throughout the Hemet area for the best deal on materials, the energetic Future Farmers began to take inventory of skills and talents within their ranks. "Some of us had enough experience to know the difference between framing and just nailing studdings to the joists," explains Dick Tilley, "and it seemed no time at all before we had the frame up."

Advisor Taylor says, "Most of the work was done during regular vo-ag shop instruction by all four classes. No blueprints were used. We simply built a conventional 20 by 50-foot building with a third-pitch roof. The FFA district organization provided $200, and our chapter treasurer arranged for financing the remaining $550.

After covering the greenhouse frame with plastic, the problem of maintaining uniform temperature remained. It was solved with a 50,000 BTU forced-air unit heater and fan-pad cooling system.

In nine weeks the project was completed and chapter members started benefiting immediately. Not only is the greenhouse used for instruction in ornamental horticulture, but it also provides a steady source of income from bedding plants. Profits during 1959 offer high hopes that the venture will pay for itself within a year.

"Soon we expect to be making money for the chapter treasury," adds chapter member Curtis Bell.

But still other lessons are to come it seems. Lessons in bookkeeping and merchandising will result from the chapter's year-round plant sales. Propagation, growing, and experimenting with living plants are some of the more technical aspects of the greenhouse lessons.

Besides simple propagation procedures such as budding, layering, and leaf propagation, chapter members will now be able to grow many special crops and try out such growing containers as peat pots and aluminum packs.

And the project offers even more! The important job of greenhouse manager gives each boy a nine-week crack at handling the responsibilities of the nursery's regular business. Accompanying sales work also offers valuable training.

The Hemet experience poses a challenge for other FFA Chapters! It's always a good practice to explore the possibilities of group effort and "learn by doing."

COST OF HEMET'S GREENHOUSE

Foundation	$140.00
2 x 4 Framing Lumber	200.00
Heater	170.00
Pad and Fan	180.00
Plastic	30.00
Total	$720.00

In FFA opening ceremony, the president asks, "Future Farmers, why are we here?" before rapping the gavel.

FUTURE FARMERS WHY ARE WE HERE?

By J. R. Warmbrod

". . . To practice brotherhood, honor rural opportunities and responsibilities, and develop those qualities of leadership which a Future Farmer should possess."

. . . Over 10,000 Future Farmers will repeat these words in Kansas City as a part of the National Convention's opening ceremony October 12-15. It's been a standard procedure in local, state, and national meetings for more than 25 years.

But how many members merely memorize and repeat the words without fully realizing their meaning. How many really attempt to answer the president's familiar question, "Future Farmers, why are we here?"

Actually, these words which we repeat in unison at each meeting are a restatement of the primary aim of the FFA—the development of agricultural leadership, cooperation, and citizenship. Although different words are used, notice how the two statements express the same general thoughts.

These statements lay the ground rules which we must follow in planning and conducting FFA activities. If we are to accept the words of our motto, "Learning to do, doing to learn," we must first learn cooperation, citizenship, and leadership by doing. Remember the joke about the cautious mother who wouldn't allow her son near the water until he had first learned to swim? By the same token, no one can learn cooperation without getting involved in some activities which require the use of it.

Let's examine every section of this ceremonial expression, find out what they mean, and develop some practical activities which will help to develop them in the individual.

Brotherhood and Cooperation—Cooperation is not a one-way deal. It's a pooling of efforts where all involved must share in relation to their abilities, resources, interests, and responsibilities for accomplishment of the group's purposes.

Future Farmer chapter cooperation includes such activities as buying materials for farming programs, selling products of group enterprises, organizing or operating improvement associations, and working with other school groups. Regardless of the activities, the important thing is for everyone to do his part. Someone has said that cooperation means to conduct yourself in such a way that others will want to work with you.

Rural Opportunities and Citizenship—The phrase, "Honor rural opportunities and responsibilities," is brought to life by these words from the Creed, "I believe in the future of farming, with a faith born not of words but of deeds . . . I believe that to live and work on a good farm is pleasant, as well as challenging; for I know the joys and discomforts of farm life and hold an inborn fondness for those associations which, even in hours of discouragement, I cannot deny."

The word "citizenship" implies living in such a manner as to show allegiance to a government and society in return for certain rights and privileges provided by that society and government. All of us are familiar with American citizenship rights.

The Code of Ethics adopted at the 1952 National FFA Convention includes some guides for conduct that can lead to development of good citizenship. It states in part, "We will conduct ourselves at all times in order to be a credit to our organization, chapter, school and community by: showing respect for the rights of others and being courteous at all times; being honest and not taking advantage of others; respecting the property of others; demonstrating sportsmanship in the show ring, judging contests, and meetings; being modest in winning and generous in defeat; attending meetings promptly and respecting the opinions of others in discussion; taking pride in our organization, in our activities, in our farming programs, in our exhibits; and in the occupation of farming and ranching."

Leadership—This quality isn't limited to those in positions of authority. Leadership is any contribution to the establishment and accomplishment of the goals of the group. Therefore, "Indians" as well as "chiefs" can exercise leadership. A leader is not necessarily a "wheel."

Every chapter member, from Green Hand to chapter president, should participate in some form of leadership activities. Speaking before groups is one of the most common methods of developing leadership. Future Farmer public speaking and parliamentary procedure contests provide training in this vital field. Recitation of the Creed by newly-initiated Green Hands may well be the first step in the development of a top public speaker. Once such fields are mastered, they can be utilized in other school groups and activities.

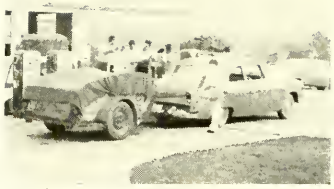
Another technique frequently used in developing leadership abilities among FFA members is the use of committee where all members have an opportunity to participate in group projects.

The ideas of leadership, cooperation, and citizenship are common threads running through the aims, purposes, creed, and ceremonies of the FFA. After a little study, it's apparent that most of our ceremonial words pack a bigger wallop than we first noticed.

◆◆◆

Answering the president's familiar question with the equally familiar words shown in the subhead, these Future Farmers are also re-phrasing the FFA aim.

Photos by Earl Schweikhard



Here's one way to take an FFA trip. Rent a trailer for luggage and other gear. Do traveling in private autos.

Tips *FOR FFA* Trips

Here's another way. If local rules permit, borrow or rent a school bus for transporting members and supplies.

THE YEAR'S FIRST schoolbell sets many chapter officers to thinking about summer. That's when most FFA educational tours begin.

More and more chapters are cashing in on the recreational and educational value of these one-to-three-week summer jaunts. For some, it's just a means of "livening" up an otherwise dead summer social program. For others, it's a chance to see the country at a nominal fee. But for the vast majority of advisors, school administrators, and Future Farmers who annually troop to such sites as Grand Canyon, Niagara Falls, and Carlsbad Caverns in bright yellow schoolbuses, it's a chance to fulfill a vital part of vocational agriculture and FFA goals.

Future Farmer tours, once reserved solely for the "elite" chapters, are now commonplace to an ever-increasing army of travel-conscious young farmers. The economy, convenience, and fellowship of such trips are winning new recruits each year. Small chapters and large ones are participating. Potential tourists are asking old-timers what it takes to plan, conduct, and finance such an attractive chapter project.

But there is no pat answer to this question. It depends primarily on the situation. However, there are several cardinal rules of any successful FFA tour. One of the first items to check and solve is that of expense. Determine a chapter budget for your tour. Allocate whatever chapter funds are needed and estimate how much each boy must contribute. This will be difficult at first, and only experience will develop accuracy. But for a starter, 10 Mt. Airy, Maryland FFA chapter members traveled 2,350 miles on a 1957 trip to Canada for $20.40 each, or $.009 per boy mile for gas, toll charges, and food.

The Fayetteville, Texas FFA Chapter pays all expenses for about 20 members each year out of chapter funds. Their tours vary from 2,000 to 4,000 miles and costs average $35 a day. Funds come from a donkey basketball game, a barn dance, and livestock enterprises. Future Farmers spend "out of pocket" money only for souvenirs and other "extras." They use an official schoolbus while Mt. Airy's tours are usually made in private autos.

Another pressing question most tour beginners ask is, "How much equipment should we take and how do we get it?" Naturally, the size of your chapter, length of tour, and local support will partially determine the answer.

However, most Future Farmers prefer to do much of their own cooking. It's economical besides being lots of fun. Mt. Airy Future Farmers borrow a bottled gas stove from the local Lion's Club, locate two ice coolers among the chapter membership, rent a luggage trailer, and they're off!

A local butane dealer in Fayetteville furnishes Advisor Gabe Dooley with a stove and fuel. The high school donates a bus and the school cafeteria loans dishes and silverware.

Roadside parks are ideal rest points and meal preparation sites for tours.

Swimming is an ever-popular form of recreation on extensive FFA travels.

Planning is another essential of a good tour. And most successful ones are in the planning stage shortly after the first schoolbell tolls. There are many ways of getting the ball rolling. Both Dooley and Advisor Harold Thompson of Mt. Airy have turned the whole thing over to chapter officers who appoint a tour committee. These busy Future Farmers make advance plans for sleeping accommodations on the trip. Most agree that it's easier to get bunks in smaller towns because of less political red tape in dealing with local officials. Fayetteville Future Farmers have slept in livestock exhibit barns, gymnasiums, and roadside parks. Mt. Airy members stay almost exclusively at state parks, FFA camps, or farms.

The Texas tourists also make plans for food preparation while on the road. Members are divided into groups of three for menu planning and cooking. They reserve the last two bus seats for bedrolls, cooking gear, and other supplies. A list of suggested clothing is given to each member well before trip time. A special approval form is provided for the parents of each tourist. When it is signed, a travel itinerary is supplied to keep parents informed of each day's plans.

Any chapter with interested members can plan and conduct a satisfactory summer tour. Just make sure you don't forget such items as short-term insurance for every member, first-aid equipment for the trip, and entertainment other than sightseeing. Swimming, softball, boating, and fishing are only a few possibilities.

But after all, why go on an FFA tour at all? Isn't it a lot of trouble for everyone concerned? Sure, but nothing worthwhile ever comes easily. A good tour will require hard work, careful planning, and lots of cooperation. But the rewards are much more than sightseeing or a good time. You can also use a tour to:

1. **Get Photos for Chapter Programs.**
2. **See Many Types of Farming.**
3. **Promote FFA Good Will.**

USDA Photo

With broilers a major enterprise, many producers are now show-conscious.

How to Produce Champion Broilers

IT TAKES extra work, time, and expense to produce champion broilers. Show-minded producers will do better by altering certain management practices which are standard in commercial production.

Special planning and preparation will pay, too. Experts recommend getting the house ready two days in advance of delivery, allowing two square feet of floor space per bird. That's twice the space necessary in commercial growing, so a 10′ by 10′ house should house no more than 50 broilers.

Make sure the house is clean, properly disinfected, and equipped with six inches of floor litter. Wood shavings, ground corn cobs, or peanut hulls make excellent litter.

Some poultrymen advise beginning with a White Cornish Cross to obtain maximum meat or breast and legs. And it's a good idea to buy in lots of 50 birds or more to insure uniformity. Buying direct from the hatchery will reduce transportation hazards.

MANAGEMENT

Plan on stirring litter once a week to prevent packing and subsequent breast blisters on your show birds. Get the brooder operating about 24 hours before the chicks arrive. Electricity, gas, or infra-red bulbs are best heat sources and a hover-type brooder temperature should be 95 degrees out to the edge and up to two inches above the floor. Heat should be gradually lowered five degrees each week, down to the 75 degree mark. Discontinue heat altogether at that point if birds are well feathered. Cardboard or wire guard rings will keep baby chicks near heat, water, and feed.

Keep lights on chicks constantly for first 10 days. Afterwards, alternate on and off at night with an automatic clock in two-hour shifts using one constant low watt bulb to prevent crowding.

After chicks are well feathered, allow plenty of fresh air ventilation. Fifty-five degrees is an ideal temperature. Fans are recommended for circulation in hot weather; and it's a good practice to open the south door during winter if chicks are past four weeks. Too much heat causes poor feathering and fleshing. But don't tolerate excessively cold temperatures either. Frozen water in the house should be a warning signal. Solid-floor range shelters provide good ventilation. Wire floors tend to cause breast blisters.

HEALTH PROBLEMS

Don't debeak unless you see definite signs of cannibalism or feather picking. A good vaccination program should include Newcastle immunization at one-day of age. Put bronchitis or bronchitis-Newcastle combination vaccine in drinking water at three weeks. Forget fowl pox unless there is considerable infection. Increase heat by three degrees when birds show signs of vaccination effect to maintain comfort during the resulting fever.

Internal parasites may reduce gain considerably and thus your chances for a ribbon. Roundworms are the chief trouble in this department. Prevention is the secret in combatting roundworms and sanitation is the best weapon to use. Once you find them in your birds, however, the damage has been done. Specialists recommend removing litter after each brood, adding a half-inch of dirt, and removing all worm eggs.

External parasites such as blue bugs, lice, mites, and fleas also lower broiler quality, reduce gain, and cause skin discoloration.

FEEDING

Cheap feed and poor feeding practices will kill your championship hopes. Get the best feed available. (This isn't always the highest priced either.) Insist on a broiler starter, not a replacement chick starter.

For the first six weeks feed a 22 percent protein starter adding something over three percent fat. From six weeks to ten days before showtime, keep the same fat percentage in an 18 percent protein broiler finisher.

Your critical feeding time is during the last 10 days before showtime. Feed one pound each of corn gluten meal and cracked yellow corn with eight pounds of broiler finisher for seven days. For the final three days, rely on a ration of cracked yellow corn and broiler finisher, mixed half and half.

Put fresh feed out at least four times a day. If you have time, wet the ration with milk or water to assist growth and stimulate appetite. But don't risk molding or souring by leaving wet feed out longer than 15 minutes, warns the Texas Agricultural Experiment Station.

READY FOR SHOW

When your birds reach show size, make sure you clean their legs, feet, and feathers. Wash feet and legs with warm water and soap. Then apply sweet oil or vaseline to legs, but keep it off the feathers.

Feathers are cleaned with a full bird bath in warm water with mild detergent. Rub with, not against, the feathers. Rinse several times with clear, warm water. A little bluing in the final rinse will emphasize white feather color. After towel drying, place bird in a warm room or coop. This operation should be completed 24 hours before showtime.

Good breeding and proper selection have their part in producing champion broilers. But these management principles are just as important. Don't lose out by depending too much on luck and pedigree.

Bamboo at left is stacked for paper manufacture tests. Note tall Japanese variety below.

FISHPOLE FARMING

By Charles R. Koehler

TO THE FARM BOY with a cane fishing pole, the immediate question is, "Will I catch any fish?" But, someday soon a far bigger "catch" may be the bamboo pole in his hand.

The experts say bamboo will have a great many farm and commercial possibilities once the know-how is garnered. It could become a brand-new crop for several million acres from Virginia to Texas plus a Pacific coastal area.

Even now, a farmer would find bamboo useful for plant stakes, bean poles, slat covering for seed beds, shading houses, and possibly ladders, scaffolding, fruit and vegetable crates, and temporary trestle work. Also, the leaves of many species, fresh or silaged, make good fodder.

Commercial uses include fish and rug poles, masts, furniture, window drapes and shades, decorative products, and edible sprouts. Some research has been done in developing bamboo uses for interior paneling, plywood manufacture, concrete reinforcement, and for what may well be the biggest market of all—paper manufacture.

Bamboo yields approximately four times as much cellulose per acre as does well-managed Southern pine and, grown on a large scale, is much more profitable. It would prove a welcome commercial crop for paper manufacture, greatly alleviating the heavy demand on Southern pine.

Bamboo would be more profitable because it matures faster than pine.

Also, most of the bamboo used in the United States today is imported. While it already has many uses, others are being researched. The chief problem is to develop a big enough acreage to meet a commercial demand. Since the demand won't exist until the acreage is planted, experts say, a kind of stalemate has occurred. The solution, some say, is through subsidy.

Hundreds of bamboo varieties are classified in two general types—running and clump. The former is hardier and can be grown in the coastal plain and Piedmont areas or on the West Coast as far north as the Columbia River. The clump type does well in southern Florida and in the Rio Grande valley, but neither thrives in mountainous areas.

Running bamboo has withstood temperatures as low as 5 degrees F. Most are practically disease free, and their rapid growth above and below soil permits little interference from other plants.

Propagation is by rhizome cuttings, started in a nursery for a year and then transplanted to the field. Four years later the field will be stocked with culms ranging from one to three years old. Growth often is as rapid as a foot a day. Crop yields vary from under four to over 20 tons per acre. Authorities are quick to recommend good fire protection methods.

Bamboo is usually "strip harvested" by cutting one-fifth to one-quarter of the acreage in 30-foot lanes where culms can be classified for use according to size.

Like most crops, bamboo responds well to fertilizers and apparently certain minor soil elements—research is checking this—lead to unusually fast growth. While more than 40 million acres are potential bamboo lands, the experts warn against considering it a marginal or swampy terrain crop. It grows best in soils with a water table at least three feet below the surface.

The U. S. Department of Agriculture has conducted experiments with over 200 varieties of bamboo at its Plant Introduction Garden near Savannah, Georgia, where it has a 50-year-old bamboo plantation. Recently, the Herty Foundation conducted a three-year laboratory investigation with a plant for paper making.

The Foundation report was very encouraging but emphasized a need for more research before a large-scale planting is justified. One USDA researcher estimates that 10,000 acres of bamboo would keep a medium-sized pulp mill in operation. One hundred thousand acres was suggested for extended trial in a report to Congress by the Commission on Increased Industrial Use of Agricultural Products Research. The idea is to replace crops which are in surplus—for example, cotton and peanuts—with bamboo. Before this can be attempted, more data is needed on production, utilization, engineering and, marketing economics.

Like most new products, tireless efforts, often hampered by a lack of funds, will eventually produce research results that will open a way for profitable bamboo production.

Additional information can be obtained from: The Herty Foundation, Savannah, Georgia; the United States Department of Agriculture, Washington 25, D. C.; Clemson College, Clemson, South Carolina; and Georgia Tech Experiment Station, Atlanta, Georgia.

◆◆◆

Knowledge is like a torch . . .

The higher you hold it the farther it is seen.

At the Perfect Circle laboratories our constant purpose is the acquiring of knowledge of products and their installation which will improve the service an engine gives to its owner.

But we realize the mere acquisition of this knowledge would accomplish but little if we failed to pass it on to those who design, manufacture and maintain the world's motor vehicles and other internal combustion engines. Hence, our researchers freely reveal their findings to all automotive engineers and their organized associations. For those who service and maintain internal combustion engines, we periodically hold local Doctor of Motors clinics. In the field, our technical staff is always available for help and counsel.

We give of knowledge that we may receive it from others.

Perfect Circle

Piston Rings...Precision Castings...Power Service Products...Speedostat

HAGERSTOWN, INDIANA • In Canada: DON MILLS, ONTARIO • PERFECT CIRCLE INTERNATIONAL, FT. WAYNE, INDIANA

Mr. Merritt Hill, Ford Motor Co. and Chairman of FFA Foundation Sponsoring Committee, speaks at a dinner.

Hester shows Dedication plaque to 1956 FFA President, Dan Dunham, who turned first spade of earth for construction of the new FFA building.

National FFA President Adin Hester calls to or

Future Farmers enjoy barbecue at Fort Hunt prior to a tour of Mount Vernon and Dedication of new FFA Building.

FFA's First NATIONAL L

ANOTHER "FIRST" was notched in FFA history with the successful staging of a National Leadership Training Conference in Washington, D. C.

Top Future Farmers from 47 states participated in the July 21-24 event. The Conference was designed to develop FFA leadership on a state and national level; exchange leadership ideas among states; and to show workings of the nation's capital.

State FFA officers worked side by side with national officers in planning and delivering talks, conducting discussions, and participating in colorful dedication ceremonies of the new FFA Building near Alexandria, Virginia.

The entire program sparkled with high-ranking government officials and tours to historic shrines. Lawrence G. Derthick, U. S. Commissioner of Education, officially welcomed Future Farmers to the Conference. Greetings also came from Edward Foss Wilson and Arthur S. Flemming of the Department of Health, Education and Welfare.

Seeing the President of the United States at the White House was a thrilling highlight of the Conference. In his greetings, President Eisenhower inspired the group with the statement, "Because of your capacity, as future leaders as well as future farmers, you have the potentiality of influencing many, many thousands out and beyond the confines of just your own organization."

At the Jefferson Memorial, Agriculture Secretary Benson discussed "Thomas Jefferson, as a farmer," and stressed Jefferson's belief that agriculture should be taught in institutions of higher learning.

The Future Farmers also toured such points of interest as the Iwo Jima Monument, the Tomb of the Unknowns, Lincoln Memorial, Washington Monument, the United States Capitol, and the White House. At Mount Vernon, home of George Washington, the national FFA officers placed a wreath on the tomb of America's first President.

National Advisor W. T. Spanton recalls history of FFA during Building Dedication at left. Below. U. S. Senator Frank Carlson of Kansas delivers the event's official dedication address.

rst session of National Leadership Conference.

At the Jefferson Memorial with famous Washington Monument in the background, Secretary of Agriculture Ezra Benson addresses the FFA Conference.

In the shadow of Jefferson Memorial, Virginia Congressman Watkins Abbitt tells of Thomas Jefferson as a leader.

Tennessee Senator Kefauver, left, and New Jersey Congressman W. B. Widnall, chat with officers from home states.

ADERSHIP CONFERENCE

The tours were planned for definite tie-in with leadership training and inspiration, as well as sight-seeing in the nation's capital. On a visit to the National Archives Buiding, Future Farmers had a chance to see the original United States Constitution and Bill of Rights.

At a dinner sponsored by the Ford Motor Company, each of the six national FFA officers discussed selected advantages of the vocational agriculture and FFA program. Their presentations were received so well that National Convention goers will have a chance to hear them in October.

When questioned, state officers were unable to single out specific parts of the program as being most important. Most said something like, "It's such a well-planned program, I'd say everything in it was vitally important. And it's something we can take back to our states, too. I don't think there's an officer here who won't be a better one after this Conference."

A special leadershp kit was prepared for each participant by National FFA Executive Secretary William Paul Gray and other members of the National FFA Office. It contained tips on speaking, dressing, and many other phases of improving the performance of an FFA officer.

During their rounds of the Capitol, FFA members were treated to greetings from Lyndon Johnson, Senate Majority Leader; and Sam Rayburn, Speaker of the House of Representatives. An educational discussion of "How Laws Are Made," was conducted by Tennessee Senator Estes Kefauver and New Jersey Congressman William Widnall.

It was a memorable experience for some 350 young farmers representing the world's largest farm boy organization. And it was worthwhile, educational, and inspiring while instilling, "those qualities of leadership which a Future Farmer should possess."

A smiling President "Ike" walks from the White House with FFA President Hester and Edward Foss Wilson of the Health, Education and Welfare Dept. to address Future Farmers below.

Soil from 49 states is deposited at the base of FFA Building's flagpole.

Stones are presented to the National FFA Office to construct a memorial.

Claremore, Oklahoma, FFA President Rodney Mullinax presents the state's stone to State Officer Gary Jones.

BEHIND THE SOIL and STONES

By Joe Boyd
Associate Editor

DEDICATION of the new FFA building near Alexandria, Va., climaxed the first National FFA Leadership Training Conference and launched a new era in Future Farmer history.

Located on land once owned by George Washington, FFA's patron saint, the attractive Colonial brick structure houses both *The National FUTURE FARMER* Magazine and the Future Farmers Supply Service.

Future Farmers from all parts of the country participated in colorful dedication rites, highlighted by the presentation of special stone and soil samples from their home states. Here are some accounts of ingenuity, imagination, and hard work which went into the selection of these samples.

One stone lay underwater for over a hundred years near a grist mill owned by the great, great grandfather of Ohio's current state FFA president. Oregon's contribution came from the foot of famous Chimney Rock, a prominent landmark of the Old West's Oregon Trail. And North Dakota's stone was taken from the International Peace Garden, located near the Canadian border as a memorial to over 140 years of uninterrupted peace between two bordering nations.

Oklahoma brought a stone from the Will Rogers Memorial located at the great humorist's hometown of Claremore. Illinois chose a rock from a creekbank where Abraham Lincoln once walked. New Jersey's stone came from George Washington's military headquarters, once located at Morristown.

South Dakota Future Farmers went to historic Mount Rushmore in the Black Hills for their stone. Busts of Washington, Lincoln, Jefferson, and Theodore Roosevelt are carved atop this solid granite mountain which towers 6,000 feet into the sky. New Mexico recreated memories of the Lincoln County War with a stone from Blazer's Mill where Billy the Kid participated in one of the battles. A limestone rock from the foot of a "Boot Hill" grave in Dodge City provided the Kansas contribution.

Vermont presented a sample from the world's largest granite quarries in Barre; while Utah submitted red sandstone from the state's famous Zion Canyon area. The "baby state" brought a piece of volcanic lava rock representing the hardships which Hawaii Future Farmers face in establishing successful papaya and coffee orchards in the Puna area.

Nevada's stone came from Virginia City, site of the wealthy Comstock Lode, which has yielded over seven hundred million dollars in gold and silver. Texas' striking red granite sample was a duplicate of the material used in building the nation's largest State Capitol. And California Future Farmers commemorated the fabulous gold rush days with a stone from the Mother Lode in the Sierra Mountains.

Stones from New York, Mississippi, and West Virginia were taken from their state FFA campsites. Kentucky, appropriately enough, took a sample from the state FFA Leadership Training Center.

The Soil Story

Missouri's dedication soil came from the farm of the state's first American Farmer. Ohio chose to bring soil from the state FFA president's farm which has been in the same family since 1828,

Illinois' soil sample came from the Morrow Plots, oldest experimental farm established by the government.

when it was bought from the American Indians.

Virginia, steeped in historical tradition, furnished a soil sample from the Appomattox battleground, site of the Confederate Army's surrender in 1865. New Mexico's soil was spaded from the Mesilla Valley, a part of the Gadsden Purchase. This valley once trembled under the thundering hooves of Longhorn cattle following the Chisholm Trail and fleet horses of the Butterfield Stage Line.

Alabama brought soil from the state agricultural college campus; Nevada selected a sample from the country's first federal reclamation project; and Illinois' packet of earth was once part of the Morrow Plots, first official experimental farm established by the federal government.

Other soil came from the top of Pike's Peak in Colorado; Tennessee's "Hermitage," home of Andrew Jackson; and the grounds of a New Jersey school founded by Clara Barton, organizer of the American Red Cross.

Kansas Future Farmers submitted a

Continued on page 61

No corrosion worries when handling liquid fertilizers with Stainless Steel

In 1898, Sir William Crookes foresaw an "impending catastrophe" because wheat yields were not keeping up with the growing population. But, as Sir William also predicted, nitrogen fertilizers saved the day . . . and the population!

It took a lot of research and field tests to make handling of *liquid* complete fertilizers practical and profitable. A material had to be found that would hold up under the corrosive action of *every* type of liquid fertilizer.

Exhaustive laboratory and field tests showed that only Stainless Steel would give long, trouble-free service without the danger of corrosion and annoyance of clogging nozzles. United States Steel cooperated closely with liquid fertilizer manufacturers and tank fabricators to make the handling of liquid fertilizers a profitable and time-saving operation for farmers. If you would like information on metals for handling liquid fertilizers, write to United States Steel, Agricultural Extension, 525 William Penn Place, Pittsburgh 30, Pennsylvania.

USS is a registered trademark

USS **United States Steel**

1. Steady animal with heels and legs while taking wool from brisket and chest. Note marked area.

2. Pull up and over your left knee to stretch sheep's skin. Break out belly wool from fleece.

3. Hold skin tight and place two fingers over teats when the udder or scrotum area is reached.

4. Grasp skin at the stifle joint. Press down to tighten. Use one outward stroke here.

How to Shear Sheep

SHEARING isn't a "lost art" in the fall months. Twice-a-year shearing is common in parts of the South and West. Further, breeders everywhere hail such practices as shearing rams before the breeding season and taking fleece from lambs headed for October feedlots.

All these practices are money makers. Fall feeders usually gain faster without fleece, and rams can give much better service if shorn.

In both spring and fall shearing, it makes good business sense to do the best job possible. Each sheep will require some special handling due to individual conformation differences. But a general shearing pattern will help develop both speed and skill in this operation which yields some 18 percent of every sheepman's yearly farm income.

One of the first things to remember about sheep shearing is to prevent injury to the animals. In some areas, every skin cut is a potential screw worm case. Here are a few suggestions to help you get a more desirable wool clip while keeping sheep healthy.

Use your left hand sparingly. It's best to hold sheep with the legs and feet. Reserve left hand action for assistance in positioning the sheep or to tighten the skin.

Unless a position is really uncomfortable, a sheep won't bother to complain much. But don't start holding his legs or letting his feet touch the floor unless you want a wrestling match.

Once you've started, carefully move the sheep's body during shearing so the clippers run over a "mountain" rather than down a "valley," so to speak. Rolling and packing will be greatly simplified if the fleece is cut in one piece with no "second cuts." Second cuts are made when the shearer backs up to clip a patch of skipped-over wool. Too many second cuts may reduce the grade and value of your wool. Prevent them by keeping the shearing head close to the skin throughout every stroke.

Top sheepmen rightfully regard shearing as the first step in marketing quality wool. No profit-minded livestockman can afford to tolerate haphazard shearing methods. The accompanying photos are not a complete guide to this operation, but they do offer a basic guide for shearing your next sheep. *(Photos: Sunbeam Corporation)*

5. Press the left stifle joint and shear the left hip with downward strokes, ending just short of the backbone. Be sure to shear dock.

6. With sheep's nose upward and right side against your leg, draw the clipper strokes along the jaw, shifting left hand as needed.

7. Keep sheep's head against your left leg, holding ear with the left hand. Then remove wool from top of the head and back of neck.

8. Squat slightly and push sheep's body forward. Press sheep's shoulder to tighten skin and hold its head between your elbow and leg.

9. Changing the position of sheep's left foreleg will keep skin tight as side strokes are made. Pressure causes sheep to roll slightly.

10. Start with wool around the right eye and ear. Then remove wool from the jaw, keeping skin tight with left hand. See leg position.

The **Businessman** in the **Blue Denim Suit** is aware of consumer demands in meat, milk and eggs. He relies on Master Mix to help him produce a preferred product.

MASTER MIX FEEDS

McMILLEN FEED MILLS, FORT WAYNE, INDIANA

FREE CATTLE BOOK for boys and girls

32-pages of information on how to select, feed, fit, show calves and manage beef steer & heifer projects

Brand-new, 2-color booklet with lots of pictures prepared by leaders in the beef cattle industry shows you how to win success with your beef projects regardless of breed.

CLUB LEADERS AND VO. AG. TEACHERS
Write for several copies to use for instruction or as a guide for your club members.

SEND TODAY FOR FREE BOOK
Glue coupon to postcard or write for colorful 32-page cattle booklet.

Name_____
Address_____
City_____ State_____
Mail: American Angus Ass'n, St Joseph, Mo.

IS THE OFFICIAL FFA CALENDAR HANGING IN YOUR COMMUNITY
? ? ? ? ? ? ?

Helps You Get TOP PRICES for MORE EGGS

PILOT BRAND Oyster Shell is the ideal eggshell material—almost pure calcium carbonate. It helps you get the most eggs with the strongest shells, the kind that consistently bring more money at the market. Keep low-cost PILOT BRAND in the hoppers at all times. It's a profitable practice.

In the bag with the big blue Pilot Wheel — at most good feed dealers.

PILOT BRAND OYSTER SHELL For Poultry

Oyster Shell Products Company
Mobile, Alabama

Sea-Going Farmers

Another example of Vocational Agriculture meeting the special needs of the local community it serves.

By J. J. Cox—Reprinted by special permission from Journal of Florida Education Association

TO REACH their chapter farm, agricultural students at Florida's Crystal River High School have to put out to sea. Unlike conventional dry land farmers, these boys at Crystal River hop in a boat to check on their crop. Seven miles from school, down river and into the Gulf of Mexico, they find their staked out fields of oysters.

For a long time, Crystal River High's course in agriculture was a "dry" study; and then Instructor DeWitt Crawford saw a pile of oyster shells on the bank of the river. It started a chain of thought. What had happened to the once bountiful oyster harvests from nearby Crystal Bay? Why shouldn't the study of oyster culture be a "natural" for his agricultural classes?

Teacher Crawford was on the right track. His students in this little central West Florida town had grown up with feet wet from fishing. They were solidly behind any schooling that involved salt water. The district supervisor of vocational agriculture approved the idea; and when conservation agent Marion Oliver heard of it, he said he would see if the State Board of Conservation could help the project develop.

"It's a wonderful conservation project," said Robert M. Ingle, director of research. "Oyster cultivation is an important form of farming to Florida." Ingle offered copies of a Conservation Department publication, *Oyster Culture In Florida*, as a textbook. He said he would act as an adviser to the students in their unique venture. As a final step before the program got under way, a salinity check of the proposed oyster plot was made by Kenneth Woodburn of the Conservation Department's marine laboratory in St. Petersburg. The saltiness was to an oyster's liking.

After about a year of preparation

Continued on page 54

These Crystal River Future Farmers are getting a boat ride with a field trip to their chapter oyster demonstration plant seven miles from the high school.

THIS IS THE LEVACAR, "MACH I"

...somewhere between Hero's steam kettle and the first spaceship

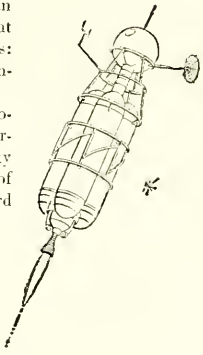
The years ahead are for the imaginative and bold. An age of liquid fuels and count-downs. Of young scientists hurtling toward outer stars in sealed missiles. Of speeds approaching that of light; distances that dwarf the sun's orbit.

Meanwhile, back on earth, over 2000 years have passed since the jet engine was first invented when Hero, an Egyptian scientist, sent jets of steam through bent tubes and made a ball spin around.

Between Hero's invention and future space flight, "earthbound" scientists at Ford Motor Company are at work on a new kind of car. It will travel over 500 miles an hour—*without wheels!*

A full-scale operating model, the Levacar "Mach I," can actually be seen today at the Ford Rotunda in Dearborn, Michigan. Three *levapads*, powerful air jets, raise it off the ground 5/1000 of an inch; another jet propels it forward at incredible speed. "Mach I" dimensions: 94" long; 18" high; 54" wide. Controls are electric.

"Mach I" might well foretell tomorrow's high-speed land travel, carrying passengers swiftly over intercity distances. This is another example of the future-minded thinking at Ford Motor Company.

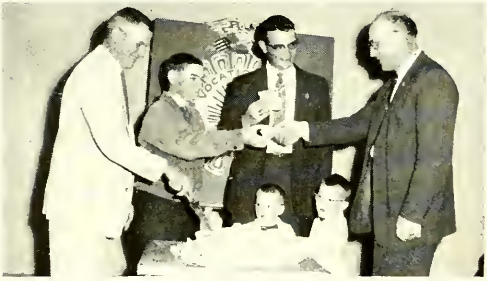


FORD MOTOR COMPANY

The American Road, Dearborn, Michigan

FORD • FALCON • THUNDERBIRD • EDSEL • MERCURY • LINCOLN • LINCOLN CONTINENTAL

Convention time is "dress-up" time for North Dakota Future Farmers. White shirts, blue or gold ties, and blue FFA jackets make up their convention "uniform." What do you think of their appearance in this photo?



Orin Clark, Johnston, South Carolina, FFA president presents chapter's 25th anniversary cake to Advisor J. F. Wyse. Former officers are also participating.

photo roundup

Darrell Silveira, winner of a youth contest sponsored by a pharmaceutical firm, leaves with ag teacher William Braun on a 10-day expense-paid trip to parts of Northern Europe.

The Rural Young People's Sessions of the 1959 National Safety Congress get a going over in this Chicago meet. Gerald Eickmeyer of Newton, New Jersey represents FFA.

Marianne Phillipp, left, has just been elected sweetheart of the Dwight D. Eisenhower High School FFA Chapter. She was later queen of their "FFA Ball" in Yakima, Washington.

A riding power mower has mechanized home improvement projects for Bobby Hulion, Ringgold, Louisiana member.

"NO KIDDIN'... THIS IS IT!"

You bet! That's what you expect and get when the MF Symbol is on any machine or implement. 'Cause Massey-Ferguson engineering is *in step* with modern, young America . . . You can be sure we've got our eye on the future—of farming and you!

For instance, let's look at just one thing of which we're particularly proud—tractors. Only Massey-Ferguson Tractors have the Ferguson System . . . first to use the 3-point hitch for fully mounted implements and still the best weight-transfer design there is, in spite of all the imitations. When it comes right down to doing the job they were made for—they'll outwork, outmaneuver, handle easier than anything else on tractor wheels.

We call that "*engineering for the future*"! Don't you? Our hats are off to you . . . Future Farmers of America. You can count on Massey-Ferguson to be *in step!*

MASSEY-FERGUSON

Massey-Ferguson Inc., Racine, Wisconsin

Pace-Setter of Modern Farming . . . The World's Most Famous Combines and the Only Tractors with the Ferguson System

Looking for Land

WHERE can I get a good farm? How much should I pay for it? How will I know it's good for my requirements? These are some of the questions every young farmer faces.

Since land purchases often represent a farmer's largest single expense, it's just good business to locate good, fertile land in the beginning. Snap decisions and inexperience can spell the difference between failure and success.

Here is one simple, safe, and sound method of evaluating both a farm and your ability to make a living from it:

1. Know Farming.
2. Know the Land.
3. Know How Much To Pay.

Know Farming: Farming is a year-round business, involving sound management principles, production and disposal methods, plus constant supervision. Vo-ag training provides a basic knowledge of plant growth, animal nutrition, and soil fertility from which a detailed operation can be planned.

Good farmers time every purchase with caution. They advise young hopefuls to watch prices closely, rent for a few years, and buy only when the time is right.

But don't forget the social side of farming. You'll want healthy surroundings for a family home. For instance, look for a neighborly population, good schools, churches, and farmers who like to exchange work. Good roads mean access to hospitals, towns, and other necessities of modern living.

Know the Land: Be *sure* you are qualified to operate that attractive farm before pouncing on it with a sizable down payment and fixed monthly payments. Examine soil, climate, and market conditions before making the big plunge. Growing peanuts, tobacco, and other crops of the warm-climate cotton belt may be easy for you as is pasture management to dairymen of the cooler northeastern and north central states. But that's no indication the deep rich soils of the corn belt will respond as willingly to your methods.

There are nine major farming areas in the United States. Few are expert on all of them. Either stick to your area or be ready to study a new region carefully and accept good advice from others.

Avoid often-flooded fields, streams, swamps, and stony areas. Consider costs of rebuilding unproductive land and try to recognize the difference between improperly managed soil and naturally poor soil.

Shun the shallow soils; they are usually the result of erosion. Sometimes they merely camouflage underlying rock and shale ledges. Combined with hard clay they make for extremely poor drainage, and soil building practices often become a liability.

Extremely heavy clay or gumbo soils represent another common trap for the unsuspecting farm buyer. These soils are slow to warm in spring, difficult to cultivate and often are poorly drained. Soil technicians and vo-ag teachers can help spot them.

How Much To Pay: Homestead laws are still effective for some public lands, but the federal government does not maintain a list of farms for sale. The Bureau of Land Management handles most inquiries, but their selection has been gone over many times. Western irrigation projects of the Reclamation Bureau offer some free farm tracts each year. They should be selected carefully, however. It's best to check directly with the project manager to make sure all tracts will receive irrigation water.

But let's say you are an average young farmer about to buy or rent a farm already in production from an established grower. Here's a simple method of determining a fair price.

Estimate present land and building value. For example, we'll say a farm with 190 rotation acres and 10 acres of building lots, waste and roads is valued at $45,000 by current market standards. Next, figure actual crop costs and returns. Separate livestock from crop enterprises, but include all labor and machinery costs under crop operation figures. Now you are ready to determine how much you can afford to spend for renting or purchasing this land. Eight steps are recommended by the U. S. Department of Agriculture.

1. *Add Values Of All Crops Produced During Year.* Pasture is considered hay equivalent. Assume the figure is $12,656.

2. *Obtain Average Value Of Produce Per Acre.* Divide crop values ($12,656) by number of rotation acres (190). Answer ($66.61) is estimated returns from one acre. Adjust for soil production differences.

3. *Add Variable Costs Of Crop Production.* Total all family labor costs and other farming practice expenses. Ignore fixed costs. Base them on a similar management system for the proposed land. Example $4,360.

4. *Obtain Average Variable Cost Per Acre.* Divide variable costs by rotation acres. Answer $22.95.

5. *Estimate Annual Cost Per Acre Of Land.* Divide current market value of land and buildings ($45,000) by total acres (200). Answer ($225) is market value per acre. Next, add one percent to current farm-mortgage interest rate (example, five percent plus one percent equals six percent). Multiply result (six percent) by market value per acre ($225). Answer ($13.50) is annual cost per acre of the land.

6. *Determine Rate Of Return On Each Dollar Invested.* Cost of land per acre ($13.50) plus variable costs ($22.95) equals total per acre costs ($36.45). Divide this total into average value of product per acre ($66.61). Answer ($1,827) is per dollar rate of return.

7. *Determine Maximum Annual Rent.* (Rate of return on each additional acre). Multiply yearly cost of land per acre ($13.50) by dollar rate of return ($1.827). Answer ($24.66) represents maximum amount of rent this imaginary operator could afford to pay if future yields from this land equaled present production.

8. *Determine Maximum Purchase Price Per Acre.* Add mortgage rate (five percent) to a risk average (one percent). Total (six percent) divided into ($24.66) equals ($411) which represents amount the operator can afford to spend for the tillable land even though average per acre value is only $225.

Weigh all evidence carefully, get all the reputable advice possible and prepare for plenty of hard work before buying your farm. It's a risky, expensive business—but it can pay rich returns if wisely bought.

MoorMan's Field Research— the third step to feeding profits

Field Research at MoorMan's is the third step in testing a feed concentrate that will help you produce more low-cost meat, milk and eggs.

Experiments in the MoorMan Laboratories come first . . . then, tests on farm animals at one of the three MoorMan Research Farms that total 1,280 acres. If these prove satisfactory, the MoorMan Field Research Team takes over. They check the adaptability and performance of a product under ordinary conditions on *hundreds* of MoorMan customer farms and ranches.

A simple example would be the use of Vitamin A in MoorMan's Mintrate* Blocks. Initial experiments showed this to be a desirable addition. Field Research *proved* that it helped produce faster gains and better animals, but only in certain areas and under specific conditions. As a result, Vitamin A is now an *optional* ingredient in Blocks. Its use depends on the need in your area.

Through observations in the field, they also make recommendations for improvement in present feeds, new forms and even new feeds.

So, *Field Research* is one of the *reasons* behind the high quality and dependability of MoorMan's Mintrates. Fully tested and proven Mintrates are your assurance that livestock and poultry get the necessary vitamins, minerals, proteins and antibiotics they need for fast, low-cost production.

STOP IN AND SAY HELLO
See Us At The Moorman Booth
American Royal Livestock Show
Kansas City, Missouri
October 17-24

MoorMan's*
Since 1885—74 Years of Friendly Service
Quincy, Illinois

—a business dedicated to helping farmers make better and more profitable use of the feeds they raise themselves.

Trademark Reg. U.S. Pat. Off.

WORLDS "WORST" FOOTBALL GAME

By H. N. Ferguson

THE GAME was spilling into its final seconds, and as the shadows lengthened across Atlanta's Grant Field, Georgia Tech was leading Cumberland 222 to 0.

George Allen, a Cumberland fullback and now one of the inner circle of President Eisenhower's friends, took a hand-off and fumbled. The ball skittered across the ground toward a teammate, one "Bird" Paty, now an attorney of West Palm Beach.

"Pick it up!" yelled Allen.

Paty glanced at the steam-roller wave of Tech players bearing down upon him. "Pick it up yourself," he shouted back. "You dropped it!"

A few seconds later the whistle blew, ending the zaniest football game ever played. In the 42 years that have intervened since that hectic October afternoon in 1916 the game has become a legend of the gridiron. "It was positively the worst football game ever played," declares Allen with a nostalgic glint in his eye.

This unique classic would probably never have been scheduled in the first place if Cumberland's baseball team had not soundly trounced Tech the preceding spring. Tech's students and alumni had been howling for revenge ever since.

In those days, organized conferences had not yet been formed. The custom was for a top team to pick its schedule, sending out bids to schools it wanted to play. Georgia Tech, which then was building one of its first great teams—was in the process of winning 33 consecutive games—thought a substantial victory over Cumberland would add to its national prestige. For Cumberland had been undefeated in 1903, 1904 and 1905 and claimed the Southern championship. Undoubtedly some of its reputation lingered on.

Actually, the little school in Lebanon, Tennessee, was no longer a power, but it did field an organized team. However, injuries had cost the Bulldogs several top players and only 16 men were available for the trek to Atlanta.

George Allen, player-manager and financial genius of the Cumberland squad, made the necessary arrangements. His boys were guaranteed the munificent fee of $500 for offering themselves as a sacrifice to Tech's ego.

For many years afterward neither school was overly proud of its accomplishment that afternoon. But in time the game began to assume a new perspective—memories took on an extra coating of twinkling exaggeration.

Take, for instance, the question of Cumberland's longest gain that negative afternoon. The record (a complete play-by-play account of the game survives) credits Cumberland with a 10-yard gain on a pass from McDonald to Murphy.

But Grantland Rice, who did an on-the-spot coverage of the game reported, possibly with tongue in cheek: "Cumberland's greatest individual play of the day occurred when fullback Allen circled right end for a six-yard loss."

L. W. "Chip" Robert of Atlanta, then a recent Tech graduate, recalls that he served as timekeeper.

"We were supposed to play two quarters of 12 minutes each and two of 10 minutes," he relates. "When the game got out of hand, we shortened the 12-minute quarters to 10 and the 10-minute quarters to seven-and-a-half."

"I hate to dispute an official," declares R. E. Gray, an attorney from San Saba, Texas, and a Cumberland player that day, "but I distinctly recall that we started at 3 o'clock in the afternoon and played until sundown."

Manager Allen attempted to add a little power to his team on the train trip from Lebanon to Atlanta. During a layover in Nashville, he sought to recruit some "ringers" from the Vanderbilt team to bolster his under-manned squad. (This was not an uncommon practice in those days.) Unfortunately, Vanderbilt had a tough game coming up and was reluctant to make the neighborly loan. The best Allen could do was sign up Jack Nelson, a Nashville reporter and former Cumberland student, and no one even remembers the name he played under that day. But Nelson hardly made up for the three Cumberland regulars who got lost in Nashville and missed the train.

In the only picture made during this zany contest, Cumberland lines up at the right side of the field, below. Cumberland Guard Gentry Dugat, at right, didn't learn the meaning of a "down" until 25 years after the fabulous game.

The cars are safer . . . the roads are safer . . .

THE REST IS UP TO YOU!

It's great to be able to drive! To know you can go where things are happening and to know your friends depend on *you* to get them there. But *other* people are depending on you, too. Your parents are confident that you have the ability to drive safely, maturely . . . that's why you have the car. And the traffic officials who issued your license are banking on your good judgment, too.

Many others are concerned with making sure you have every opportunity to drive safely . . . and drive again. Automotive engineers have made today's cars the safest ever built, with better brakes, better tires, steering and lighting, and greater all around visibility. Traffic experts have come up with expressways, divided highways, interchanges, better lighting and easily understood traffic signs and signals.

Yes, a lot of folks are trying to make sure that you are safe when driving, but in the end, they all must depend on *you* to cooperate. And safe driving makes sense, even aside from your safety and that of your friends and others on the road . . . the more careful you are, the more often you'll drive the car.

GENERAL MOTORS A CAR IS A BIG RESPONSIBILITY...SO HANDLE WITH CARE!

One of the Cumberland players selected to make the trip was Gentry Dugat, now a Texas newspaperman-rancher.

"I had played only two games of football before," he recalls, "one in high school, and one in prep school, and it wasn't until 25 years after our famous game that I even learned what a down was. However, I was pretty husky and when they promised me the first Pullman ride of my life, I agreed to go along. I played every minute of the game."

Tech archives contain the official scorer's report of the game. The entire afternoon was a monotonous repetition of the action preceding the first touchdown. Georgia Tech won the toss and elected to kick off, defending the north goal.

"Preas kicked off for Tech 35 yards to Corney who was downed in his tracks. Cumberland's ball on their 25-yard line. Gouger went over tackle for three yards. McDonald failed to gain over center. McDonald punted 20 yards to Preas who returned the ball to Cumberland's 20. On the first play Strupper swept left end for a touchdown. Preas kicked the extra point. Tech 7, Cumberland 0." One minute of playing time had elapsed.

The Cumberland team had developed a unique set of signals for the occasion. It was the job of quarterback Morris Gouger, now president of the National Bank of Robstown, Texas, to see that there were no mix-ups. "We had tagged each player with the name of a vegetable," he explains. "If I wanted to run a play that would send our right halfback through right tackle, I'd call 'Turnip over cabbage.' Or a pass from quarterback to left end 'Tomato to carrot.' The trouble was that Tech was soon making Irish stew out of our system."

With ten seconds to go in the first quarter, McDonald kicked off for Cumberland. His 50-yard boot was gathered in by Spence who ran the ball back 90 yards for a touchdown. Preas converted to make the score 63, Cumberland 0. Tech had pushed across nine touchdowns and Preas had kicked nine extra points.

The baffled Cumberland team moved to the other end of the field. Then they stared in amazement. A fresh Tech team was lining up against them. It was just as well the Cumberland lads didn't learn the reason for this until later.

The fact was that several of the Tech alumni had gotten together before the game and persuaded Coach John Heisman to institute a two-platoon system, which would alternate by quarters. A steak dinner had been promised to the team rolling up the biggest score.

"Beginning the second quarter," states the scorer's report, "McDonald kicked to Turner, who returned to Cumberland's 20. Senter went for a touchdown. Preas kicked goal. Score 70-0."

Midway of the second period McDonald kicked off for Cumberland and Shaver returned the ball 70 yards to the Cumberland 10. Strupper went around right end for 9 yards, and suddenly grounded the ball on the one-yard line. Alexander, Tech's huge left tackle, had never scored a touchdown in a game and it was decided he should now have the honor. When the ball was snapped, however, the entire Tech line fell away and the lumbering Alexander was

on the *newest* HARLEY-DAVIDSON wheels

Pick a route to good times! Whether you're "scooter-minded" or partial to lightweights, Harley-Davidson has come up with new fun-wheels for you. Thrifty, nifty — they're the ideal transportation for work, school or play.

NEW TOPPER SCOOTER — If you want to travel by scooter, Harley-Davidson presents the *Topper*. Here's scootering at its best — one that tops all others in performance and beauty. It almost drives itself — thanks to automatic *Scootaway* transmission and *low and forward* center of gravity.

NEW SUPER-10 LIGHTWEIGHT—This Twin-Flare, two-tone slimster is the answer to your prayers. Easy driving with hand clutch, foot shift. Easy riding with Tele-Glide front fork and foam-rubber filled saddle. Safety-equipped with new larger head and tail lights, new electric horn. Alternating current generator electrical system.

Best of all, it's so easy and economical to own a *Topper* or *Super-10*. Average up to 100 miles per gallon... both can be purchased through easy-pay-plans that fit your pocketbook. Drop in at your Harley-Davidson dealer today and get full details on America's newest fun-wheels. Or mail the coupon for free colorful folders.

Harley-Davidson
MILWAUKEE 1, WISCONSIN

HARLEY-DAVIDSON MOTOR CO.
Dept. NFF, Milwaukee 1, Wisconsin
Please send me information on Harley-Davidson Fun-wheels
☐ Topper Scooter ☐ Super-10 Lightweight
Name.....Age.....
Address.....
.....

"I wouldn't try to cheat you, Tex— you signed a contract to perform for 10 percent of the gate."

today's projects **TOMORROW'S FARMING**

New advances being made in projects on today's farms point to great futures in agriculture. Through the leadership in educational and extension services, farming is striding ahead.

These advances are being spread throughout Union Pacific territories. New brochures and new motion pictures are presented, along with forums and exhibits, to interested audiences. Sometimes these are in the U.P. Agricultural Improvement car as it tours the West.

Farm youth are being helped in higher education, with Carl Raymond Gray scholarships offered by Union Pacific in counties along the railroad.

All along Union Pacific, there is help advancing to give greater opportunity to today's farm youth.

smeared. Three times the Tech players refused to block, but on fourth down Alexander staggered across the goal line as his teammates howled with laughter.

When the half ended, the second quarter team had scored exactly the same number of points as the starting eleven. Both were now tied for the steak dinner prize.

Old Heis, who was later to be enshrined in football's Hall of Fame, was never one to take things for granted. Between halves, he exhorted his squad. "You're doing fine," he assured the players. "But you can't be sure what those tricky Cumberland boys may have up their sleeves. They could pull a fast one on us yet. So be alert, men!"

But in the Cumberland dressing room there was no time for a pep talk. Every minute was utilized in reviving the boys sufficiently to get them back on the field for the second half. Oddly enough, the Cumberland players have difficulty today identifying their coach. But it has been established that he was Butch McQueen, a law student from Dallas who took his degree in midterm after the 222-0 shellacking and has never been heard from since.

The most experienced player on the Cumberland team was Pete Gray. He had played several seasons at Oklahoma University.

As the teams took the field for the third quarter, Pete had an inspiration. He asked the Tech player opposite him if they had any Sigma Nu's on the team. "Why, yes," was the reply, "Red Shaver over there is one." Pete rushed over and gave Red the fraternity grip. "After that," Pete reminisces, "most of the plays went around the other end."

Even with the shortened quarters, Tech ran up 54 points in the third period and 42 in the fourth. The Cumberland lads were ready to drop from exhaustion, but George Allen kept up up a constant chatter. "Hang on, boys!" he encouraged. "Remember that $500 guarantee."

A. L. McDonald, a Louisville, Kentucky attorney, and captain of the Cumberland team that day, argues that the huddle system was born with this game. "We were so tired that I had to call the boys together every little bit to figure our surest way of living through the game. Our huddle idea seemed to catch on after that."

George Griffin, Dean of Students at Georgia Tech now, was a quarterback that day. In the final period he saw a blanket-draped Cumberland player sitting on the Tech bench. "Hey, you," he shouted, "you're on the wrong bench!"

"No, I'm not," protested the battered Lebanon Bulldog. "They're not going to send me back into *that* mess again!"

Scoring at the rate of more than four points a minute, the records established at Atlanta that day have stood through the years: Most points scored in a game, most yards gained (978), most players scoring touchdowns (13), most points kicked after touchdown by one player (18 straight by Preas) and most points scored in one quarter (63).

Oddly enough, in spite of the heavy scoring neither team made a first down. Cumberland was unable, and Tech substituted touchdowns instead.

When the game was over, Coach Heisman put his Yellow Jackets through a half hour's hard scrimmage. Then all hands were awarded the steak dinner they had been fighting for.

The surviving players of this bizarre game held a reunion in Atlanta in 1956, on the 40th anniversary of their epic struggle. Six Cumberland and 22 Tech players came from all parts of the country to rehash old memories and celebrate the playing of the un-funniest football game of all time.

That night at the banquet everyone made a speech. And Gentry Dugat echoed the sentiments of each of his former Cumberland teammates when he spoke. Gentry explained that he was now enjoying the quiet, peaceful life of a Texas rancher. "And well deserved, too," he grimaced, "for I saw enough traffic pass over me here in Atlanta that day to last me a lifetime." ◆◆◆

THE PRODUCERS OF FUNK'S G-HYBRIDS

PRESENT

NEW

25 minute edition of their film classic

THE GREAT STORY OF CORN

FUNK'S G HYBRID

Now, in a new convenient length, The Great Story of Corn is available for classroom showings and meetings.

Must viewing for everyone associated with agriculture. Traces the history of corn from the Inca and Mayan civilizations through modern hybrids. Beautiful scenes and wonderful original music—both educational and entertaining. (25 min.—color)

Order them at no charge from the

- **FARM FILM FOUNDATION**
  1731 Eye St. N. W., Washington 6, D.C.
- **THE VENARD ORGANIZATION**
  PEORIA, ILLINOIS

Winning days ahead...

A junior membership in the American Hereford Association can be the first step in a lifetime of success with Herefords. A junior membership immediately identifies you with the Hereford tradition of consistent leadership — whether competing for ribbons or for profits. It associates you with older cattlemen who are established in the business and who can advise and help you in many ways.

Ownership of one registered Hereford, in your own name, can start you as a junior member of the American Hereford Association. This entitles you to the privileges of a lifetime member (except voting) including recording and transferring your cattle at membership rates.

AND, of course, one Hereford can start you on the road to pride and profit as a cattleman. Pride in the beauty and character of whiteface cattle — dominant winners in the show ring. Profit in a breed that produces more calves . . . more weight per calf . . . top prices at the nation's markets.

THE AMERICAN HEREFORD ASSOCIATION

DEPT. 2 — HEREFORD DRIVE — KANSAS CITY 5, MO.

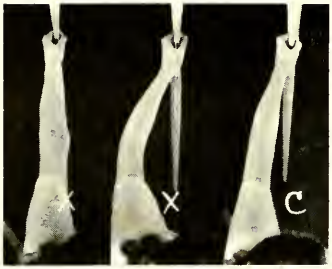
A new Hereford handbook for youth — "The Future Cattlemen" — describes every phase of a beef project — FREE. Send name and address.

More calves...more pounds...more profit

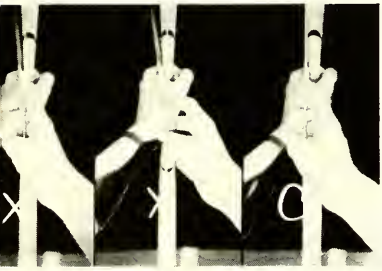
HEREFORDS

ARCHERY ANGLES

By Raymond Schuessler

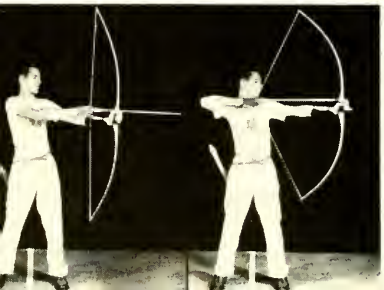


Your elbow should not be locked like the left one, nor bent too much like the middle one. Correct bend at right.



String should rest along first joint of all three fingers, right. Do not grip beyond first joint, left, nor too close to ends of finger, middle.

Push slightly with bow arm and pull straight back with string arm. Stand at right angles to line of flight.

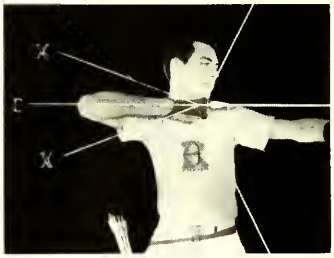


WITH THE craftsmanship and science that goes into the making of a modern bow, anyone can become an expert archer. The most important thing is to practice consistently for the first three weeks in order to get the feel of the release and develop strength in holding the bow steady.

Back and shoulder muscles used for drawing a bow will need strengthening before shooting becomes easy. Almost any bow weight will feel heavy at first because many unused muscles will be brought into play. But they will respond very quickly to a little practice.

Practice, however, must be the right kind. Nothing is so discouraging as picking up bad habits, and then later trying to unlearn them.

Make your release smooth. Let fingers relax from left to middle position. Recoil will snap hand back slightly, right. Side movement spoils the aim.



String arm must move in straight line as continuation of the arrow. Small variation from C position shown will affect the arrow flight and accuracy.

The following information will help you get off on the right foot. However awkward it may feel at the beginning, keep shooting until you instinctively do the right thing. If possible, shoot with an experienced archer.

In your first practice, stand about ten yards from the target. A cardboard box stuffed with paper will do nicely. Forget about accuracy; try to learn the right techniques. If you are shooting with a buddy, check each other for flaws in form.

Your shooting equipment must include an arm guard to protect your forearm against the release of the string; and a shooting glove, or tab, to protect your release fingers.

The most important factor in good shooting is the release. Don't fling open the hooked fingers in one violent motion. This will cause wobbly and inaccurate flight. The release must be smooth and unhurried. The motion of the release hand must be straight back and not away from the face.

You cannot shoot your best unless you have the correct size arrows. Arrow size is determined by your arm spread. Stand against a wall and mark off your reach. Then refer to the following chart. The chart also shows the size bow you should use. If you are using the right bow and arrow, at full draw the tip of the arrow should come to rest on your forefinger.

Arm Spread In Inches	Arrow Length In Inches	Suggested Bow Length
57-59	22-23	
60-62	23-24	4′ 6″
63-65	24-25	
66-68	25-26	5′
69-71	26-27	
72-74	27-28	5′ 6″
75-77	28-29	5′ 9″
Over 77	30	6′

How to aim? How does one learn to throw a baseball accurately? Learn the above techniques. Then aiming will quickly begin to take care of itself by cooperation of mind and body, of eye and muscle, just like in throwing a ball.

B.F.Goodrich

Smileage on the farm

9 OUT OF 10 users say:

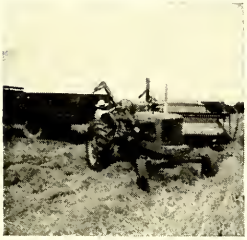
B.F.Goodrich farm tires are the best I've ever used!

(Based on a survey of farmers all over the country)

Charles Clapp, Greensboro, N. C., writes, "B.F.Goodrich Power-Grip tires give me the traction I want—something I have not found in other makes of tires."

Don P. Stitt uses over 100 B.F.Goodrich tires on his Williamsville, Ill., farm—reports Super Hi-Cleat tractor tires have given as much as 7 years' service before retreading!

TO find out the kind of service B.F.Goodrich farm tires give, we asked the men who have used them (photos opposite). 9 out of 10 of them reported B.F.Goodrich tires are the *best* they've ever used! They said that for all-around performance, you can't beat B.F.Goodrich farm tires—and for money-saving service, you can't beat B.F.Goodrich Smileage dealers. But don't take our word—find out for yourself. Ask *your* neighbors. Then see your nearby B.F.Goodrich Smileage dealer who is listed under Tires in the Yellow Pages of your phone book. *The B.F.Goodrich Company, Akron 18, Ohio.*



Orville Martin, Hagerstown, Maryland, likes the service he gets from B.F.Goodrich tires so well that he uses them on his tractors, trucks, wagons and baler.

Gillis Breaux, cane-farmer of Raceland, La., uses B.F.Goodrich Special Service tractor tires because he finds they outpull any other make and wear longer too.

Uno Freed, Essex, Iowa, writes, "When the fields get sloppy, Power-Grip traction pulls me through. I think B.F.Goodrich tires are the most dependable you can buy."

Art Dabson, Chandler, Ariz., says, "The outstanding feature of Power-Grip tractor tires is long life. I use B.F.Goodrich tires on my pickup trucks and car too."

B.F.Goodrich *farm tires*

Continued from page 40

the classroom doors in Crystal River High School swung open to oyster culture—an agricultural project. In the fall of 1957, some 25 students in Instructor Crawford's 10th, 11th, and 12th grade classes started learning about "spat," "larva," and "cultch," terms that apply to oysters. They learned that oysters alternate between being male and female and that the female produces as many as 100,000,000 eggs at one spawning. They learned that in addition to man, there are many other creatures that like oysters — conch, leeches, crabs, and snails. And, important to the serious student of oyster culture, they learned that acre for acre, oysters are Florida's most valuable crop.

After the "skull sessions" indoors, the boys are always eager for the trip down the Crystal River to their fields. The beds that were planted last year around Camp Island Pass are doing well. This year the plan is to go into the demonstration side more extensively to determine which method of cultivation is best.

"We intend to plant in two different types of water," said Instructor Crawford. "We'll try clear, smooth water and rough, turbulent water. In each location, we'll use three methods: shell, poles and 'coon' oysters."

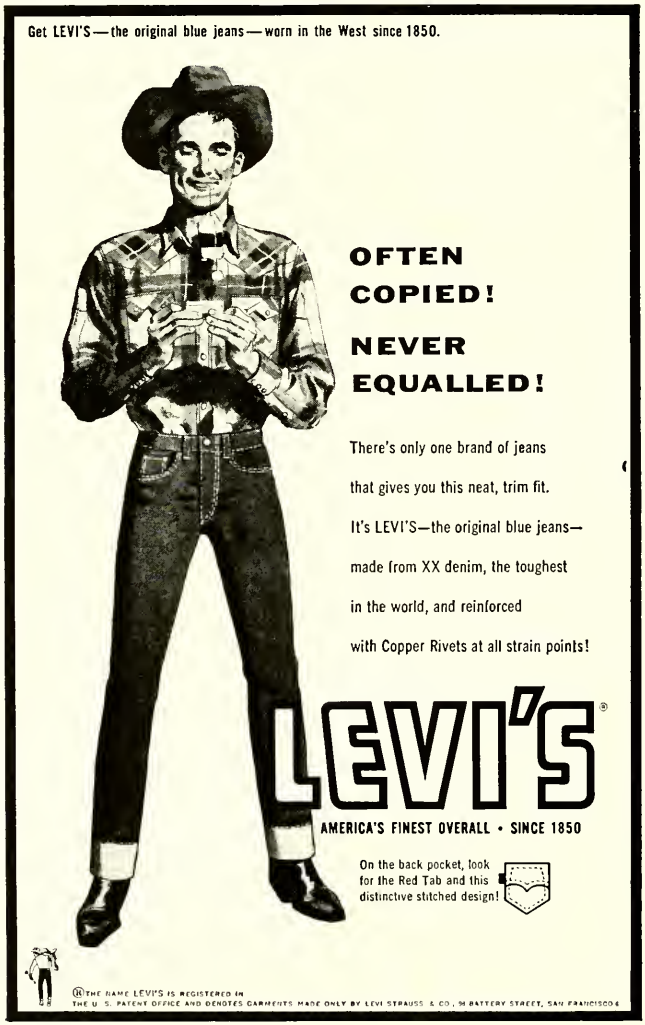
Crawford explained that both shell and poles are to give the baby oysters something to cling to and start building their home shells. Otherwise, the babies would probably sink in the soft bay bottom and suffocate. The old oyster shell is plentiful around the region, and black-jack oak poles can be cut in nearby woods. "Coon" oysters are undeveloped specimens that cling to partly exposed reefs and won't develop properly unless relocated in submerged, favorable growing areas.

"If Crystal River High School can show the people in that area the right way to cultivate oysters, it could be the way of restoring a once profitable industry here," says School Principal W. F. Holmes. Already, a number of the students have indicated their interest in the work as a future occupation.

Last year, Crystal River's 280-enrollment high school won the Florida Council of Farm Cooperative's district award. The oyster project did it, judged on its value and importance to the students and the state. A few months ago, a group of students told about their oyster studies over an Orlando TV station. Recently some of the boys journied to St. Petersburg and attended a special oyster class presented by Conservation Department Biologist Ingle.

As popular and as valuable as oysters are, it may be that other coastal high schools in Florida will follow Crystal River's example and provide oyster-farming projects for their vocational agriculture classes.

◆◆◆


Get LEVI'S—the original blue jeans—worn in the West since 1850.
OFTEN COPIED!
NEVER EQUALLED!
There's only one brand of jeans that gives you this neat, trim fit.
It's LEVI'S—the original blue jeans—made from XX denim, the toughest in the world, and reinforced with Copper Rivets at all strain points!
LEVI'S®
AMERICA'S FINEST OVERALL • SINCE 1850
On the back pocket, look for the Red Tab and this distinctive stitched design!
®THE NAME LEVI'S IS REGISTERED IN THE U. S. PATENT OFFICE AND DENOTES GARMENTS MADE ONLY BY LEVI STRAUSS & CO., 98 BATTERY STREET, SAN FRANCISCO 6

"That's odd—there isn't any island on the chart named Sos . . . oh, well—"

Keep your eye on MOLINE

For the advanced farm power you'll want in the years ahead

TODAY, farms are getting bigger — farmers fewer. Chances are, the farm you'll run tomorrow will be bigger than your Dad's . . . with less help *available* to run it. With better and more powerful machinery *needed* to run it.

All Minneapolis-Moline machinery is planned, engineered and built with today's *and* tomorrow's farming in mind. Every feature, every technical advance, has come about because farmers have told us what they want and need in their equipment—today *and* tomorrow.

Consider: the Moline G VI tractor (shown here); dollar-for-dollar it's the world's mightiest farm tractor. Or the Moline line of corn-harvesting equipment — winners of more World Corn-Picking Championships than all other makes combined. Or the really *new* ideas in labor-saving, cost-cutting machinery like the Uni-Farmor (5 machines in one and self-propelled, too!) and the "Rock 'N Roll" Corn Picker that's the world's first 3-point hitch *mounted* picker (goes on in minutes instead of days).

You can count on Moline for new ideas, new methods, new machinery. You can count on Moline to help you in your modern farm management. And you can count on Moline to help you farm more profitably — today *and* tomorrow.

Look to *MOLINE* for the news in modern farm machinery

MINNEAPOLIS MOLINE

BUCKNER GIVES
Best Effective
COVERAGE PATTERN

Independent tests under field conditions prove Buckner Rainers give best effective coverage patterns, plus small droplets of water for slow, positive penetration. From sprinkler to sprinkler, Buckner irrigates best.

Plus **The Original SANDPROOF BEARING**

Buckner's GDG Bearing* is the only bearing with three washers at both top and bottom for a better sandproof seal, self - starting rotation, and longer sprinkler life.

*Patent Pending

See Your Local Buckner Dealer

BUCKNER MFG. CO., INC.

P. O. BOX 232, FRESNO, CALIFORNIA

NFA Observes 25th Anniversary

THE National Organization of the New Farmers of America will observe its Silver Anniversary when it meets in Atlanta, Georgia, September 28-October 2. Though many of the men who blazed the trail will be missing, their foresight is reflected in the objectives of the organization which have received little revision down through the years.

The NFA was organized as a national organization at Tuskegee Institute, Tuskegee, Alabama in 1935. It began with 339 chapters and a membership of 10,995 New Farmers located in 17 southern states. Today, there are 1,039 chapters in 15 southern states and a total membership of 51,205.

A number of former members who are now successful citizens are being invited to take part in the Silver Anniversary proceedings. Among them are David Simmons, first national NFA president, who is now a farmer in Georgia; and James W. Warren, Jr., former national officer, and presently district supervisor of vocational agricultural education in North Carolina.

Anyone familiar with the rural areas of the South can recognize the progress the organization has made, and how the purposes of vocational agriculture are being met through the NFA. Thousands of young men who passed through NFA ranks have become successful farmers and leaders in their respective communities.

Many former members have become vocational agriculture teachers, principals, public school teachers, agricultural leaders, county agents, doctors, ministers, and lawyers.

"It's a problem. If I write so she can read it, she'll find out I can't spell!"

Higher energy feeding!

Your calves get 10% fat, 28% protein in Peebles' 10-28 Super Calf-Kit!

Now! You can raise stronger, healthier calves that make better herd replacements. Start them the Peebles' 10-28 Super Calf-Kit way!

Here's a milk replacer that's tailor-made for higher energy feeding. Tests prove that Peebles' gets young calves off to a stronger start. Its balanced formula produces important early weight gains...promotes vigorous health, bigger frames, silkier coats.

Peebles' prevents scours, too. It's Thermogized and fortified with antibiotics Aureomycin and Terramycin. Mixes easily into a smooth, creamy liquid that calves really go for...stays in suspension. Replaces all fresh milk after colostrum. Get Peebles' 10-28 Super Calf-Kit today.

Peebles' 10-28 SUPER CALF-KIT

WESTERN CONDENSING COMPANY
APPLETON, WISCONSIN
World's Largest Producer of Whey Products

The National President's farmstead.

On The Farm With YOUR NATIONAL PRESIDENT

Hester, second from right, was 1956 Guernsey showmanship winner at the Oregon State Fair annual dairy show.

WHEN ADIN HESTER isn't chalking up one of the 125,000 miles he expects to travel this year, the 20-year-old National FFA President can likely be found somewhere on his 240-acre Guernsey dairy farm.

Travel and farming have taken a heavy toll on his time since being elected to the top FFA post last October. There's no place for college or much social life for the busy young man from Aurora, Oregon. He dropped out of college for a year in order to devote full time to his farming program and the staggering duties of a National President.

He's been lucky in one respect. With three brothers at home ranging in age from 12 to 17, there's not much need for hired help on his farm. Still there's lots to do in keeping tabs on Hester's $8,000 operation. His 14 Guernseys and half-interest in some 22 Chester White hogs require constant attention.

Hester doesn't tolerate any half-way management measures with his program. He can't afford to. Farming is his choice of a vocation, and he plans to pursue it full time after completing college work.

The National President grew into farming. He paid for his first Guernsey heifer with extra labor on his dad's farm. The heifer and a half-acre cucumber patch comprised his Green Hand project program which yielded a $445 labor income.

It didn't cost Hester much money to enter the hog business. He received a Chester White gilt in a chapter pig chain to begin his operation as a sophomore. Swine profits mushroomed from $58 that first year to $340 during his senior year in high school. Since graduation, his hog program has been steadily increased to a major livestock enterprise.

A master dairy showman, Hester's primary interest is milk production. He's just as interested in knowing how to produce plenty of good dairy feed as he is in knowing how to mix a balanced ration. His work in establishing a farm pond to handle pasture irrigation needs; strict attention to regular soil tests; and reliance on a sound rotation system has helped to double the yields of forage, oats, barley, and corn produced on the Hester acreage. For his far-sighted work in this field, Adin received Oregon's 1958 FFA Foundation Award in Soil and Water Management.

Hester is licking the small acreage problem with proper fertilizer use. His management system calls for both liquid and dry fertilizers including 16-20-0; 10-16-8; 82 percent anhydrous ammonia; lime, land plaster, and several trace element mixtures. All barnyard manure is returned to the land.

Good 1958 yields from 39 acres of Oregon 355 field corn, 10 acres of irrigated pasture, 40 acres of timberland pasture, and eight acres of barley helped Hester boost total labor income past the $5,000 mark for his American Farmer degree application. His top year while still in high school netted nearly $2500. He also pocketed $350 in prize money for public speaking appearances.

The personable young farmer shares milking facilities with his father. They have a bulk tank system and are currently interested in raising herd production records. Before his elevation to National FFA President, Hester worked as part-time manager of a neighbor's dairy herd earning extra capital needed to increase his own herd. While in this position, he saw the advantages of DHIA testing and brought the recommendation back to his father. Now the entire Hester herd is on official test.

Some wonder what makes a top Future Farmer like Hester tick. Others ask why a young man is willing to work long hours on the farm and still devote a full year as an officer in the FFA organization. Hester has a ready answer. "Such things as FFA public speaking were a God-send to me. As a high school freshman I was too bashful to carry on an ordinary conversation," he says.

"It has been said that vocational Agriculture is the theory and FFA the 'living' part of our program. I believe this. And I want to do anything possible to repay the great debt I feel I owe the organization."

These grateful words come from a young man who stood before 10,000 spectators in 1957 to deliver the first place speech in the national FFA public speaking contest, traveled 40,000 miles as Oregon's FFA president, and unselfishly donated about three-fourths of his time during the year as your National FFA President.

This farm truck with hydraulic hoist represents part of Hester's $650 investment in machinery and equipment.

TRAPPING TRICKS

By Raymond Schuessler

Opossum

THE LIVELY DEMAND for fur pelts brings millions of dollars a year to American trappers. On every farm and in nearby woods can be found many furry animals which can contribute to farm income.

Techniques for trapping vary and the devices are endless. Here is a review of those most popular, designed for the peculiarities of each animal. The steel trap is best for most fur bearers, but cottontail rabbits can be caught in box traps baited with sweet apple, carrot, or pumpkin.

Trap size and type will vary with the habits and cunning of each animal. First, remember that steel traps can be carried away by some captured animals. When this seems likely, chain fast to a stake or tree. Some can be attached to a grapple or clog which yields when animals try to escape, but can't be dragged far without snagging.

Spring a trap several times when setting to make sure it works right. Oil all joints before opening season. Another caution, most states have laws regarding trapping fur-bearing animals, so investigate before setting a string of traps.

To learn more about various animals and traps, familiarize yourself with this "trapper checklist."

1. Prepare for the winter trapping season by careful summer planning. Spot tell-tale evidence left by animals and future trap locations.
2. Conserve animal food supply by fencing against livestock, especially along stream banks.
3. Map your trapping territory noting den locations, trails, feeding areas, and good trap areas.
4. Don't depend entirely on "scents." Rain and snow may destroy them.
5. Handle bait as little as possible. It's best to use wire hooks or special gloves smeared with blood or "scent."
6. Bury your bait in the ground for several days.
7. When streams are frozen, try setting traps near ice holes. Natural holes are found at rapids. Keep artificial holes open with a chopper.
8. When water recedes, a canopy of ice is left along shore under which mink and muskrats travel.
9. If traps are set in ground hollows, line with leaves or grass to prevent freezing to the ground.
10. Set traps to spring hard. This will prevent accidental springing by extremely small animals.
11. Protect land sets with snow shelter in winter and cover with wood ashes.
12. Remember, some animals—especially foxes—like to dig in campfires. It's a good place for sets.
13. Follow animal trails to the first narrow passageway. Then set trap for the inevitable return.

Marketing

If you are successful, you'll want a ready market for furs. Most of the U.S. raw fur crop is picked up by mail order buyers. Some traders either sell their furs to dealers and brokers or consign to independent auction houses.

Advertisements in newspapers, farm magazines, and outdoor publications all offer market sources to trappers. They usually grade the furs and mail your check promptly. Some trappers sell to one or two houses regularly, but most shop around from season to season. It's usually best to sell to an established dealer, however.

Pelt quality is determined by examining both the fur side and leather side. Weather conditions partially determine primeness. Proper fur grading takes time and experience, but is an art well worth learning.

One big amateur fault is poor packing. Never ship green furs that haven't been stretched and dried. Check with established trappers or the local library for full packing information. Basically, you should pack skins in cloth or burlap with leather against leather or fur against fur. Fine furs should be individually wrapped in absorbent paper or cloth before packing. Sew the bundle tightly. Make package large enough to lay skins out or they will crease. This detracts from full beauty in the fur grader's eye.

Raccoon

DAVID NEWELL

Mink

DAVID NEWELL

Young Farmers BOOKSHELF

IF these selections aren't available at your book store, write to the publishers listed. Say you "saw it in *The National FUTURE FARMER*."

Farm Tractor Maintenance (Interstate Publishers; 19-27 North Jackson, Danville, Ill.; Price $3.50)—Here's a handy book to have in any farm home. Both young mechanics and economy-minded veteran farmers will be interested in the 10 chapters of preventive maintenance suggestions. Plenty of trouble-shooting tips and operating hints, too.

Atoms Today and Tomorrow (Whittlesey House, 330 West 42nd, N. Y. 36; Price $3.00) — This book explains in simple language the fascinating possibilities of an atomic age. Along with some basic atom terminology, this well-qualified author stresses peacetime use of atomic power and features a chapter on "atomic farming."

Building Your Life (Prentice Hall Inc., 70 Fifth Ave., N. Y. 11; Price $3.80)—Ever wonder just what makes you tick? Or why your best friend is "that way?" This teen-age manual will help you solve some of these puzzling problems. If you long for improved personality, appearance, and health, these suggestions might help you.

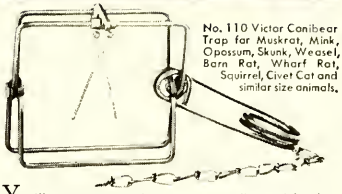
Developing Farm Woodlands (McGraw-Hill Book Co., 330 W. 42nd., N. Y. 36; Price $5.50)—Do you have enough land to include a timber enterprise in your farm business? If so, this is a detailed guide for making the initial decision, starting a farm forest, plus managing and marketing the products of your toil. Also touches on such by-products as maple sap and Christmas trees.

Build It Yourself Book for Boys (Popular Mechanics Company, 200 East Ontario, Chicago; Price $2.50)— You'll like this book if you have a few simple tools and access to some scrap materials. Contains plans and instructions for building a complete archery kit, water skis, a boomerang, and a practical printing press. Many, many others.

Food (U. S. Government Printing Office, Washington 25, D. C.; Price $2.25) —The 1959 Yearbook of Agriculture is packed with information on how to eat better and cheaper. Tips on calories, vitamins, minerals, nutrition, and food production written by 72 experts. Limited number available from U. S. Congressmen.

Boys... set the trap used by professional trappers

Victor Conibear trap



No. 110 Victor Conibear Trap for Muskrat, Mink, Opossum, Skunk, Weasel, Barn Rat, Wharf Rat, Squirrel, Civet Cat and similar size animals.

You'll want to equip your trap line with the great, new Victor Conibear – the trap used by professionals. The Victor Conibear is the world's first practical humane trap. It's the body-gripping trap which kills animals quickly, without suffering . . . without causing damage to valuable pelts.

What's more, you'll get a thrill out of all the different kinds of sets you can make: in holes, runways, cubbies, on rafters and poles. And you can make these sets on the ground, suspended, submerged in water, under ice or covered with snow.

Ask your dealer to show you the No. 110 Victor Conibear trap and the new No. 330 for beaver and otter.

ANIMAL TRAP COMPANY OF AMERICA • LITITZ, PA.

CHEVIOTS

Thrifty, hardy, easy lambing, excellent producers. Cheviot rams sire superior market lambs. Literature, list of breeders free.

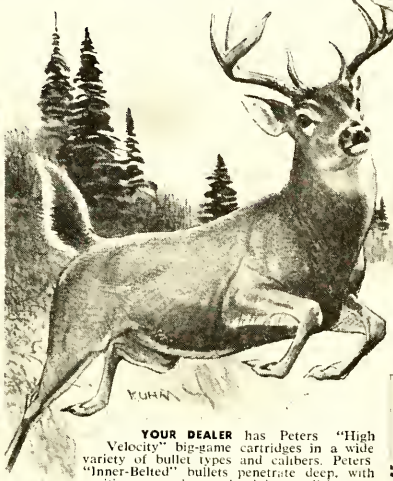
AMERICAN CHEVIOT SHEEP SOCIETY
Lafayette Hill 18, Pa.

PETERS POWER

"... drops deer in their tracks!"

says **Cliff Camp,** *Hunting Guide, Winter, Wisconsin*

"Stalking all kinds of game in these parts has been my business for 25 years, and I've usually been able to lead my hunters to where the big ones are."



"Deer spook easily, and experience counts in moments like these. But for a quick, clean shot, a hunter's no better than his gun and ammunition. That's why I use Peters 'High Velocity' ammunition for knockdown, knock-out power and recommend it to my hunters."

CLIFF CAMP is right when he says hunters need a modern gun and powerful ammunition. That's why Cliff and thousands of other smart hunters

and guides don't take chances—instead, they choose a dependable and powerful ammunition like Peters "High Velocity."

YOUR DEALER has Peters "High Velocity" big-game cartridges in a wide variety of bullet types and calibers. Peters "Inner-Belted" bullets penetrate deep, with positive expansion and minimum disintegration. They deliver "smashing" power—and Peters exclusive "Rustless" priming gives you split-second ignition.

PETERS packs the power!

DU PONT

PETERS CARTRIDGE DIVISION, BRIDGEPORT 2, CONN.

"Inner-Belted," "Rustless" and "High Velocity" are trademarks of Peters Cartridge Division, Remington Arms Co., Inc.

Stay Alive

When You Drive

By Anthony G. DeLorenzo
Vice President, General Motors

Your car key should open the door to a full enjoyment of life.

THIS IS THE TIME of the year when automobile enthusiasts—which means just about everyone—eagerly inspect the industry's new models.

Today's drivers are keenly aware of the fact that styles constantly change for the better in highways and autos. The multi-billion dollar national road-building program begun in 1956 is now rapidly replacing hazardous, overcrowded and worn-out highways with superhighways designed for modern traffic.

Traffic control methods are also being modernized to keep pace with mounting highway travel. We now have, for example, traffic signals that time themselves, radar speed-checking devices, and even air-borne traffic police. But what about the most important factor of all on the road: the *driver?* Has he, too, been modernized or is he just the same old model—minus linen duster and goggles?

Fortunately, styles in drivers have definitely changed for the better, too. A really modern driver is a far cry from the typical motorist of a few years ago. The trouble is that highway traffic is still often annoyed and menaced by a conspicuous minority of ill-trained and ill-mannered "old-fashioned" drivers.

To do a competent job, the modern driver *has* to be different, simply because modern demands on him are different. True, the purely physical act of driving has been made simpler by better roads and a variety of driver aids ranging from windshield washers to automatic transmissions. But today's good driver must operate smoothly in faster and much heavier traffic. He must be familiar with more regulations and control devices. He must be able to handle more complex maneuvers. And, because he uses his car so much, he must be skilled at driving in almost all types of highway conditions.

In fact, he recognizes that when he is behind the wheel he must demonstrate even more skill and self-discipline than in most other situations because the very nature of highway traffic can make a major tragedy out of misconduct that might be just a minor annoyance elsewhere.

The truly modern driver regards as immature and anti-social such outdated antics as trying to outwit the traffic police, taking chances to "prove" courage and skill or failing to give full attention to driving.

While not a complete "guide to good driving," these eight rules encompass the habits of most expert drivers. If you want to look your best at the wheel, if you want to enjoy fully the real fun and satisfaction that driving can bring you, make these your basic "code of the road."

Be Fit to Drive. You don't have to be a "superman" to drive well, but you should always be at your best: alert, quick-thinking and well-coordinated. Fatigue, intoxicants, emotional disturbance, and other factors can dangerously impair your ability.

Drive a Safe Vehicle. Proper maintenance is an important driver responsibility. Make frequent safety checks of brakes, lights, steering, tires, horn, wipers, glass, mirrors and exhaust system. Never load a car or truck so that vision or control is sacrificed.

Obey all Traffic Regulations. Only the immature and incompetent think they can safely ignore speed limits, "no passing" regulations, stop signs, and other traffic control measures.

Be Alert at All Times. Dangerous situations develop fast. Protect yourself and others by giving constant attention to road and traffic conditions. Be doubly alert after dark. Remember to glance at the rear view mirror frequently.

Allow a Margin of Safety. Frequent "near misses" are a sign of incompetence—not skill. Good drivers always expect the unexpected and control their speed and clearance accordingly. They never assume that other drivers or pedestrians will do the right thing—and they don't insist on their right of way at all costs.

Make Your Intentions Clear. The highway is no place for guessing games or surprises. Before stopping, turning, changing lanes, or other maneuvers that may affect nearby traffic, give proper signals and make sure the way is clear.

Be Courteous and Considerate. The "Golden Rule" is an important supplement to official traffic rules. Every time you "give a break" to another driver or a pedestrian, you help make life on the road safer and more enjoyable. Besides, courtesy is contagious.

Keep Your Self-Control. This is always a desirable mark of maturity. When you are driving, it is absolutely essential. Never lose your temper at other drivers or drive recklessly to "let off steam." Don't take foolish chances for a thrill or to try to impress others.

Continued from page 36

pound of soil from a cornfield in Bonner Springs, where the Agricultural Hall of Fame will be constructed. Another shrine was commemorated by Oklahoma's presentation of soil from the National Cowboy Hall of Fame site in Oklahoma City.

Future Farmer campsites provided soil sources for the Mississippi, South Carolina, West Virginia, and New York Associations. State officers selected soil from their home farms to form samples from Montana, Washington, Nebraska, Kentucky, Florida, Utah, North Carolina, Vermont, Massachusetts, Michigan, Connecticut, Iowa and North Dakota.

These inside glimpses represent both a cross-sectional view of Future Farmer imagination and a stirring panorama of American history. All soil samples were deposited at the base of the building's flagpole, indicating an aggregate of common goals and mutual plans for the "new day that will dawn in agriculture when all farmers are trained for their occupations and have learned to cooperate." Plans are already underway for using the 49 state stones to construct a lasting memorial dedicated to the high standards and lofty ideals so common to the FFA organization "wherever corn is grown and Future Farmers meet." ◆◆◆

HE CULTIVATED FREEDOM

By Vincent Argondezzi

A MAN who signed his letters, "a farmer," helped change the course of history just before the American Revolution. He was John Dickinson, later to be given the distinction of having Dickinson College named in his honor.

In 1767 Dickinson wrote his famous "Letters of a Pennsylvania Farmer," in which he brought forth Great Britain's misuse of taxing power. Though in his argument he gave Britain the right to external taxes on the colonists, he protested strongly against the right of the English Parliament to levy an internal tax, specifically the Stamp Act. This decree stated that no instrument of writing would be valid by law unless it was made on stamped paper shipped to the colonies from Britain.

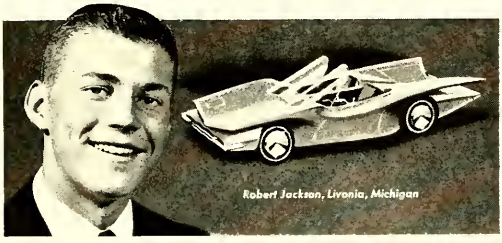
He drew a line between external and internal taxes so clearly that the colonists would not be fooled by British propaganda. The English said Parliament had the right to tax the colonies internally, claiming it was just an extension of external taxation and necessary to govern trade to and from America. Dickinson sounded a protest that became a battlecry—"no taxation without *representation*."

He wrote his letters while living on a farm near the banks of the Delaware River in Pennsylvania. In his first letter, he stated his contentment in farm living thusly, "My Dear countrymen, I am a farmer, settled after a variety of fortunes near the banks of the river Delaware, in the province of Pennsylvania. I received a liberal education and have been engaged in the busy scenes of life, but am now convinced that a man may be happy without bustle, as with it. My farm is small: my servants are few, but good. I have a little money at interest and I wish for no more.

Thus from a serene and peaceful point of view John Dickinson was able to assess the situation clearly and calmly and to rally the colonists with his pen. He served in the Revolution as a private after declining a commission as a general. He was President of Pennsylvania from 1782 to 1785. He was one of those instrumental in helping to bring about equal representation of the states in the Senate. Dickinson died in the year 1808, a farmer who joined hands with a long and celebrated list of other farmers who helped chart the successful course of our country in its critical early struggle for life and honor. ◆◆◆

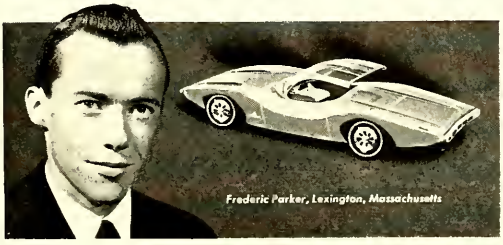
THESE BOYS EACH WON A $5,000 UNIVERSITY SCHOLARSHIP

YOU CAN TOO!



ENTER THE 1960 FISHER BODY CRAFTSMAN'S GUILD MODEL CAR COMPETITION

WIN one of 18 UNIVERSITY SCHOLARSHIPS! *worth up to $5,000 Each* or **WIN** one of more than 1,000 OTHER AWARDS! **TOTAL VALUE . . . $117,000**



HERE'S YOUR chance to win a $5,000 University Scholarship – a $1,000 Styling Scholarship – or one of more than a thousand other valuable awards.

How? By entering the 1960 Fisher Body Craftsman's Guild Model Car Competition and building a winner.

It's easy to enter! Just pick the kind of car you want to design and build – hardtop, convertible, sedan, station wagon, sports car. Then make an accurate model.

You'll be competing against boys of your own age group and you won't be on your own. You'll find plenty of help in the free booklet "Designing and Building a Model Car" which also contains the few simple competition rules. You'll also receive the special Craftsman's Guild Newspaper which is full of helpful model-building tips. And if you run into a particularly tough problem, write us a letter and we'll try to suggest a solution.

Designing and building a model car is fun, it's interesting—and it can get you started on a career. Don't wait—get started today. Mail the coupon right away so you'll have plenty of time to build a winner.

Fisher Body Craftsman's Guild, Dept. F, Detroit 2, Michigan

Please enroll me in the '60 Model Car Competition. Send me the FREE instruction booklet, "Designing and Building a Model Car."

NAME ..... (Print) First Name Middle Initial Last Name

ADDRESS ..... (Print)

CITY & ZONE ..... STATE ..... (Print)

IMPORTANT. *Only boys born in the following years are eligible. Check the year of your birth below:*

SENIOR DIVISION	JUNIOR DIVISION
1939	1944 ☐
1940 ☐	1945 ☐
1941 ☐	1946 ☐
1942 ☐	1947 ☐
1943 ☐	1948 ☐

Fishing Contest Winners

These are the winners in the 1959 National FUTURE FARMER Fishing Contest. The Grand Prize winner receives a 6 hp Oliver motor and the other winners receive a casting outfit of Heddon and Bronson equipment.

Grand Prize
David Skelton, Pheba, Mississippi

Class One
David Skelton, Pheba, Mississippi
Steven R. Strauss, Belfield, North Dakota
Joe Paterson, Cheyenne, Oklahoma

Class Two
Eddie Snyder, Petroleum, West Virginia
Lamar Oxford, Ruston, Louisiana
Roy Lessly, Davis Oklahoma (Tie)
Darrel Bray, Missouri (Tie)

Class Three
Jim Drumhiller, Marshall, Michigan
Gary Wollbrink,, Sutter, Illinois
Mike Mollet, Sorento, Illinois

Class Four
Jerry Ray Talley, Dos Palos, California
Nathan Rowell, Dawson, Alabama
Wayne Buchanana, Heidelberg, Mississippi

Congratulations FFA...

on another year of service, another year of growth

Thanks, Future Farmers of America, for your work in helping to turn out tomorrow's leading citizens. We at General Mills are proud to have played a small part in your efforts—as a member of the FFA Foundation, as a producer of products for the farm, as one of the farmer's largest customers of raw material, and through our Larro Research Farm. We, too, look to the future in our constant research in the field of agricultural science.

General Mills' Larro Research Farm satisfies the need for agricultural research under every-day farm conditions. Larro research is based on *tested* results—not on theories, which all too often are paper perfect but profit poor.

The General Mills research teams at Larro have a proven record of performance. They have helped pioneer complete feeding for poultry . . . they've perfected complete pelleted hog feeds . . . they've contributed much to beef and dairy cattle research.

The future is today for Larro Reseach Farm

By Stan Allen

AT THE START of this current baseball season, the Chicago White Sox were rated by the experts as a third place club in the American League. But going into the last month, they were leading the League. A lot of credit for their success could be given to the hard-throwing, right-handed pitcher, Early Wynn. This 39-year-old veteran has been around the majors for 20 years and is still going strong.

Wynn was born and raised in Hartford, Alabama. Like most youngsters, his early lessons came in the local league of his home town. He took an active part in sports in high school, playing both football and basketball along with his first love of baseball. He was signed by a scout of the Washington Senators way back in 1937 and was farmed out to Sanford in the Florida State League. He had a good season with Sanford compiling a record of 16 wins against 11 losses while appearing in 35 games.

After spending the 1938 and 1939 seasons with Charlotte, North Carolina, he was given a brief try with the Washington team in late '39 but went back to Charlotte in 1940. Most of 1941 was spent with Springfield, then Wynn was called back to the majors and this time to stay. After a slow start in 1942 with a record of 10 wins and 16 losses, he came on strong in 1943 to enjoy one of his best seasons with the Senators compiling 18 victories against 12 losses with a highly respectable 2.91 earned run average.

Then in 1944 he seemed to slip, posting a record of 8 wins against 17 losses although his 3.38 earned run average indicated better pitching than his won and loss record. He spent 1945 in the U. S. Army and came back in 1946 to appear in 17 games winning 8 while losing only 5. After compiling a 17 win and 15 loss record in 1947 the experts thought he was on his way again. But it seems that it was not meant for Wynn to become a star with the Senators. He came back in 1948 to lose 19 games against only 8 wins. It was then that the Senators traded him to the Cleveland Indians who thought highly of his potential.

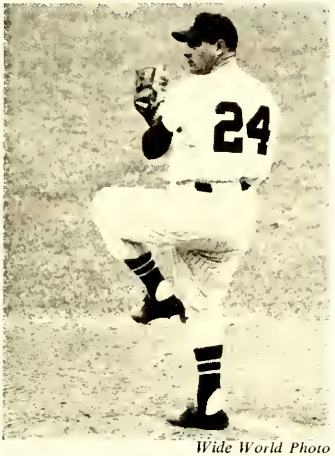
It could be said that reporting to the Indians in 1949 was the turning point in his career. He began to put the finishing touches on his pitching style by adding a curve to his good fast ball and other assortment of pitches. In his

first season with Cleveland, he appeared in 26 games, winning 11 and losing 7. His 3.20 earned run average in 1950 was good enough to lead the league and he posted 18 wins against only 8 losses. He enjoyed his first 20 game season (games won) in 1951 and came right back in '52 to win 23 games with 12 losses and posted a very respectable 2.90 earned run average with 153 strikeouts.

In his nine years with the Indians, Wynn teamed up with Mike Garcia and Bob Lemon to become one of Cleveland's "big three." He posted four 20 game seasons with the Indians, and after appearing in a total of 323 games in the nine years he recorded 163 wins against only 100 losses for a bright .620 won-loss percentage. After posting a record of 14 wins and 17 losses in 1957, Wynn had to pack his bags again as he was traded to the Chicago White Sox.

In his first season with the White Sox last year he appeared in 40 games, winning 14 and losing 16. He has been a mainstay on their pitching staff and this season he has performed as the Wynn of old. His record as of September 1 stands at 17 wins against only 9 losses with an earned run average of 3.31. With possibly five or six more games to pitch this season, he could record his fifth 20 game season at the age of 39 with 20 years of major league pitching behind him. Right now, his 266 life time wins ties him with the great Bob Feller, an ex-teammate. He has recorded 156 strikeouts to date this season which brings his lifetime mark up to 1,969.

At the rate Wynn is going now, he will probably have several seasons left to notch enough victories to earn his membership into the ranks of the few pitchers that have won 300 or more major league games.



Wide World Photo

Early Wynn, veteran pitcher of the Chicago White Sox, sets for delivery

SPONSORS
of Trips
and Tours
PROTECT YOUR GROUP WITH OUR MEDICAL EXPENSE, ILLNESS AND ACCIDENT BENEFITS
Hundreds of Travel groups have been insured under this policy. It is designed to meet your needs.
Write Today for Details
No Obligation
• Very Low Cost
• Prompt Courteous Service
• Maximum Benefits for Each
BROTHERHOOD MUTUAL LIFE INSURANCE COMPANY
230 E. BERRY STREET
FORT WAYNE 2, INDIANA

There's an Easier Way...
Here's one way you can get water. But, it's as undependable as the weather.
With a Myers pump you get real dependability . . . plenty of water, wherever and whenever you want it for pennies a week. Ask your Myers dealer to show you how!
The F. E. Myers & Bro. Co.
ASHLAND, OHIO
KITCHENER, ONTARIO
Myers Pump-Tank Unit
Plenty of Water
Low Cost

MAKE MONEY!
WITH THE PEGGY ANN PLAN
It's simple and easy to make the extra cash your group needs with the Peggy Ann Plan. Groups all across the country are making hundreds of dollars with our real profit plan selling delicious Peggy Ann Kitchen Fresh candies to their relatives, friends and neighbors.
FREE Write today for folder and complete details on our NO-RISK, NO-INVESTMENT Plan.
Peggy Ann Fine Candies
Dept. NF1
620 2nd Ave.
Des Moines, Ia.
Fine Candies Since 1932

EARN 173% PROFIT ON 25c ITEM
Sell New American Flag printed in color on parchment paper. Write. New American Flag, 145 Kennedy Street, N. W., Washington 11, D. C.

Family Plan
No Charge For Children of School Age
NEW YORK'S FAMOUS
More For Less
FAMILY PLAN
Two Rooms-Two Baths-Two TV's
One Price!
Completely Air-Conditioned
HOTEL PARAMOUNT
46th Street Just West of Broadway
Singles and Doubles Also Available
See Your Travel Agent or
Write Direct to Family Dept.
Garage at Door

POPPIN CORN
MAKE EXTRA SPENDING MONEY!
You can earn $50 to $275.00 . . . and MORE . . . selling 4-lb. bags of hulless popcorn to your relatives, neighbors and friends. The sure-fire FREE SALES GUIDE you receive shows you how.
Earn a terrific profit with each sale. Write for your free "Poppin' Profit Plan."
POPPIN-PAK SALES CO.
Box 23 Dept. NF FORT DODGE, IOWA

SPLIT-SECOND DRAW.
Gun Holsters
GUN BELTS
Tandy's Got 'em
Make your own Gun Belt and Holsters. Tandy has patterns to fit almost every gun made. "Easy-to-follow" patterns designed by experts. Save money on "ready-cut" Leather Kits — the very best heavy liveoak tooling cowhide ready for easy assembly, and tooling. Our FREE catalog illustrates & complete Kits of Holsters and Gun Belts.
WRITE FOR FREE 100 PAGE CATALOG
ORDER a set of 6 Holster patterns and 3 Belt patterns and instructions . . . . all for only $1.00 ppd.
MONEY BACK IF ARRANGED
TANDY LEATHER CO. (Since 1919)
P.O.BOX 791-NZ FORT WORTH TEXAS

Note the electrically-operated hitch on Ford's experimental "Typhoon II." A small TV screen on this 3/8 scale model allows implement observation.

TRACTOR *of* TOMORROW

PUSHBUTTON agriculture may be quite a ways off for the average farmer, but today's machinery companies are already making plans for big changes.

For instance, take the farm tractor! Maybe it's hard to imagine any startling changes in such an everyday part of farm life. But an experimental "dream tractor" model, slightly less than half normal size has been developed by one firm.

Virtually everything for the farmer's comfort and efficiency, from television to weather forecasting, has been designed into this colorful red and silver 3/8 scale model. The futuristic "Typhoon II" is the featured exhibit of a current midwest road show.

A company official says, "Its styling follows the pattern set by passenger cars in transferring comfort features from the home into the vehicles in which many people spend a large number of their working hours."

As the stylists see it, Typhoon II would have a two-way telephone installed in the right-hand roof support so that the operator could keep in touch with the barn or the house. Weather forecasting equipment in the cab would allow the farmer to plan his operation to reduce possible rain damage.

Heating, air-conditioning, and a radio speaker would be provided in ductwork on three sides of the cab. Additional heating would be afforded by coils built into the stainless steel floor.

Hydraulic power would be used to turn all four wheels independently, to adjust the distance between the wheels, and to increase the clearance under the tractor.

Power and implement controls would be actuated by toggle switches and hand controls on both sides of the operator. The tractor would be steered by means of two foot pedals, eliminating the need for either a steering wheel or stick. A warning light system would replace standard gauges on the instrument panel.

All-weather cab is equipped with two way telephone, refrigerator, weather forecast equipment, and food warmer.

A television screen mounted just above the windshield would enable the operator to view the action of rear-mounted implements, which would be attached through an electrically-operated hitch hooked up magnetically.

To make farming more pleasant, the weather-proof cab would be equipped with a food warmer, coffee maker and refrigerator. Drawers and a sink would be installed behind the seat.

The free-standing contoured swivel seat with flow-through air inserts could be moved in any direction and would tilt to permit the driver to sit upright, even if the tractor were being operated on a slope.

While company officials have no plans to market Typhoon II, they hail it as "one of many efforts to look into the future and envision the appearance of vehicles designed to make living and working in America more pleasant and efficient."

Is the Official FFA Calendar Hanging in Your Community?

Ours is a National Organization that reaches
from the State of Washington to Puerto Rico
and from the State of Maine to Hawaii.

YOUR CHAPTER IS NEEDED IN THIS PUBLIC RELATIONS ACTIVITY TO HELP FILL THE GAPS IN THE COAST-TO-COAST DISTRIBUTION OF FFA CALENDARS.

- Extra Money For Your Chapter Treasury
- Good Advertising For Your Local Sponsor
- Improved Public Relations For Your Chapter

Businessmen like this form of advertising—Contact One Today! Or Clip and Mail Coupon Below!

THE NATIONAL FUTURE FARMER
Box 29
Alexandria, Virginia

☐ *Please send sample calendars and complete information.*

Name_____

Addres_____

_____

Chapter's name_____

_____

DISCUSS THE OFFICIAL FFA CALENDAR AT YOUR NEXT MEETING. IT'S A COMBINED PUBLIC RELATIONS AND FUND RAISING ACTIVITY. YOUR CHAPTER ADVISOR HAS AN OFFICIAL FFA CALENDAR KIT OR WILL ORDER ONE.

The National Future Farmer
Owned and Published by the Future Farmers of America
BOX 29 • ALEXANDRIA, VIRGINIA

The First One Doesn't Have A Chance!

"That's all very well for your new sports car, but how about Rover?"

He (at the movies): *"Can you see all right?"*
She: *"Yes."*
He: *"Is there a draft on you?"*
She: *"No."*
He: *"Seat comfortable?"*
She: *"Yes."*
He: *"Mind changing places?"*

Robert Leonards
Goodwin, South Dakota

He: *"Does she know much about cars?"*
Him: *"Naw, she thinks you cool the motor by stripping the gears."*

Larry Worke
Blooming Prairie, Minnesota

Teacher: *"Who can tell me what made Francis Scott Key famous?"*
Albert: *"He knew all the verses of 'The Star-Spangled Banner'."*

John Newman
Decatur, Tennessee

Wife to husband: *"I'm going next door for a minute. Stir the stew every half hour or so."*

Ernest Miller
Lansing 10, Michigan

Two little boys had a favor to ask of their mother. *"You ask her,"* said the older one.
"No, it would be better if you did it," answered his younger brother. *"You've known her longer than I have."*

Johnny Wortinger
Syracuse, Indiana

If you think the younger generation isn't interested in getting ahead, just wait until one of them pulls up next to you at a stoplight.

Jimmy Rause
Magnolia, North Carolina

"What's my trouble, Doc?" asked the patient.
"I'm not sure exactly what's wrong with you, but if you were a building you'd be condemned."

Frank Sullivan
Morgantown, Indiana

He: *"You married me for money."*
She: *"And I earned it."*

Levi Howard, Jr.
Sumter, South Carolina

Visitor: *"I can't tell you how delighted I am, Mrs. Giles. My son Reggie has won a scholarship."*
Farmer's Wife: *"I can understand your feelings. I felt the same way when our pig won a medal at the agricultural show."*

Marie Owen
Bethpage, Tennessee

ROTC Student: *"I haven't a pencil or paper for the exam."*
Sergeant: *"What would you think of a soldier who went into battle without a gun or ammunition?"*
ROTC Student: *"I'd think he was an officer."*

Dennis Eastin
Ramona, Oklahoma

Wife (to Husband): *"I scratched the front fender a little, dear. If you want to look at it, it's in the back seat."*

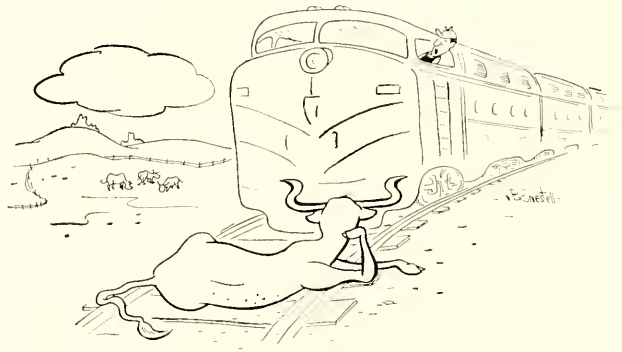
Kenneth Weather
Murfreesboro, Tennessee

Ma: *"Pa, I think it's time that we should think of our daughter getting married.*
Pa: *"Oh, let her wait until the right man comes along."*
Ma: *"Why wait? I didn't."*

Mitchell Turner
Marion, South Carolina

An old maid, shocked at the language of some ditch-diggers working near her home, complained to their foreman. The foreman promised to inquire into the matter, and called one of the men over. *"What's all this about profane talk?"* he asked.
"Why Boss," said Joe, *"It's nothing at all. Me and Butch was working there and my pick accidentally hit him on the head. Butch looked up at me and said, 'Now, really, Joseph, in the future you must handle that implement with more caution'."*

Ken Danielson
McCleary, Washington



Cartoon Caption Contest

Your response to the last cartoon caption contest was so great the editors have decided to give you another. So here it is—good luck!
PRIZES: First $15, Second $10. Third $5, plus 10 honorable mention prizes of plastic FFA billfolds, with the winners' names lettered in gold!
RULES: Find a caption for this cartoon in any of the **advertisements** in this issue of **The National FUTURE FARMER.** You must clip the word or words you choose, paste on a postal card and give the page number from which you clipped the caption. Then mail to CARTOON CONTEST, BOX 29, ALEXANDRIA, VIRGINIA, before October 23, 1959. Your caption may consist of as many consecutive words or lines as you think necessary. In case of duplications, the one with the earliest post mark will be considered. Entries will be judged by the staff of **The National FUTURE FARMER.** Winners will be announced in the December-January issue.

Now! Shift up or down to any gear with

FORD SELECT-O-SPEED

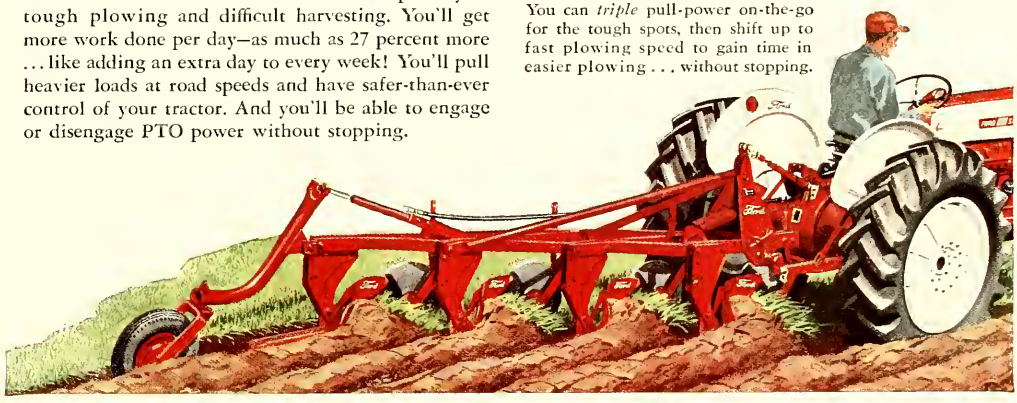
Once you try it, you'll agree: *Here's a new high in tractor performance never before available in any tractor!* For now, for the first time, you can adjust tractor power and speed to *every* load and field condition, *instantly*. You have 10 forward and 2 reverse speeds at your instant command—just a simple movement of the wrist does it. But that's not all.

You'll save fuel—as much as one gallon in ten. You'll save time—as much as two hours in ten, especially in tough plowing and difficult harvesting. You'll get more work done per day—as much as 27 percent more ... like adding an extra day to every week! You'll pull heavier loads at road speeds and have safer-than-ever control of your tractor. And you'll be able to engage or disengage PTO power without stopping.

There's much, much more, so see your nearby Ford tractor dealer and get all the facts. Ask for a try-out—judge for yourself! Ford Select-O-Speed tractors are available in 2-3 and 3-4 plow power—with gasoline, diesel and LP-gas engines—in all purpose, row crop and industrial types. Convenient terms are available—up to 4 crop years to pay. See them!

Plow up to 27% more!

You can *triple* pull-power on-the-go for the tough spots, then shift up to fast plowing speed to gain time in easier plowing ... without stopping.



Now...4 dynamic D's ...1960 new!

WHICH ONE FOR YOU?

One . . . two . . . three . . . FOUR new tractors to start the new decade of power farming. That's the news for 1960 from Allis-Chalmers. They're ready now.

Which one is yours — to do the jobs on your farm or ranch?

Is it the champion D-17, the 4- 5-plow tractor that's been setting new records in more acres worked with less fuel?

Or the D-14, winner in the full 3-plow class with the same qualifications as the D-17?

Even better field performance comes from the TRACTION BOOSTER system which has a new *wide range* that provides greater and smoother weight transfer. Hydraulic system now has improved control which *eases* mounted implements to the ground.

Or is it the new 1-row D-10 or 2-row D-12, both in the 2-plow class? Their POWER-CRATER engines introduce a new hi-torque "throttled down" power to plant or cultivate tiniest seedlings . . . yet handle heavy loads.

Drive the dynamic new D Tractors. They speak for themselves when you get on the seat. See them at your Allis-Chalmers dealer's soon.

ALLIS-CHALMERS, FARM EQUIPMENT DIVISION
MILWAUKEE 1, WISCONSIN

TRACTION BOOSTER and POWER-CRATER are Allis-Chalmers trademarks.

Ask your dealer about the Allis-Chalmers plan to finance your time purchase of farm equipment.

ALLIS-CHALMERS